

# **Chapter one**

## **Basic research and previous studies**

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# **Chapter one**

## **Basic research and previous studies**

**Theme one: basic of research.**

### **1-a Introduction**

EFQM (European foundation for quality management) excellence model in recent years had been implemented in most Arabic countries (Saudi Arabia, UAE, Jordon, etc.). 2007 the EFQM model was adopted by government of Sudan.

Giad group had adopted the EFQM excellence model since 2009 and established an internal excellence award to encourage firms to start journey of improvement. In order to insure succeeding and sustainability of award, Giad made a change in the organization structure and established a coordination department for TQM (total quality management) and award affairs. One hundred employees were certified from EFQM (European foundation for quality management) as an assessor to do the job of self assessment. Five self assessment Cycles had been done within the last five years, and about sixteen different companies were participated in this award. Organizations seeks ways to remain competitiveness, they have significantly increased their efforts to develop their knowledge, skills and capabilities of each employee to increase organizational performance, Rasli, and N.N.,(2012) globalization, new technology and competition make today's surroundings ever changing for organizations. Customers' needs and wants change rapidly making customer retention and market shares an uphill battle. Organizations have realized that improving the quality of their products and/or services is important as customers' standards of satisfaction are ever increasing Jonsdottir, (2014) our study aims to discover the impact of EFQM excellence model implementation on Giad companies' performances.

### **1-b Objectives:**

This research has main objective need to achieve which is the Impact of EFQM excellence model implementation on organizations performances, through five sub objectives:

- The impact of excellence model implementation on systems and procedures, mainly quality management system ISO 9001-2008, ISO 14001& 18001 etc.

- The impact of excellence model implementation on organizational culture. (Improving the quality culture).

- The impact of excellence model implementation on improving the organization design and structure. (Skeleton of The organization and the design of its main processes).

- The impact of excellence model implementation on managerial and employee recognition of the importance of quality and attitudes towards it, mainly the commitment of leadership towards quality and rewarding the employees to encourage them to be committed to quality issues.

- The impact of excellence model implementation on Costs of quality resulting from not maintaining a certain quality level, we mean here reducing the cost of internal failure and external failure, in other words reducing the rejects products or services in general.

1-c the Problem:

The research seeks an answer to the main question of, what is the impact of implementing the excellence model on Giad companies' performance. (SHG. industrial complex) as case study through five sub-questions.

- Is the implementation of EFQM excellence model has impact on systems and procedures that adopted by the organizations?

- Is the excellence model implementation has impact on organizational culture improvement?

- Is the excellence model implementation has impact on organizations design and structure?

- Is the excellence model implementation has impact on managerial and employees recognition of the importance of quality and attitudes towards it?

- Are the excellence model implementation has impact on Costs of quality resulting from not maintaining a certain quality level?

## 1-d Hypothesis:

The researcher believes that excellence model implementation has significant influence on organization performance, and as a consequence has a good impact on the five objectives listed above so according to Hassanb, (2011). We can assume five hypotheses as follows:

Firstly, the study aims to test the impact of the excellence model implementation on the organizations performance on the main null hypothesis: H0: The overall hypothesized model had a good impact on the organizations performance.

This general hypotheses will be maintain through five hypotheses, the researcher looks at the main hypotheses of the study regarding the relationships between excellence model implementation and our five objectives stated above. This hypothesis will be:

H1: excellence model implementation had a good impact on systems and procedures applied.

H2: excellence model implementation had a good impact on organizational culture improvement.

H3: excellence model implementation would improve the design and structure of organizations.

H4: excellence model implementation enhanced the managerial and employees recognition of the importance of quality and attitudes towards it.

H5: excellence model implementation would reduce the Cost of quality (internal failure and external failure) resulting from not maintaining a certain quality level or customers requirements.

## 1-e Methodology:

The sample unit of analysis in this study are (SHG. industrial complex).the population is 582 staff so the represented (the respondent) must be about (100) of employees. The volume of the sample in our case is similar to that used by Hassanb\* (2011). So one hundred maximum responses will be analyzed.

The primary purpose of the research is to measure perceptions of the impact of implementing EFQM excellence model on the organizations performance and to go insight into the benefits of implementing EFQM excellence model in the manufacturing industry in Giad group. The goal is to identify the overall impact of EFQM excellence model implementation on the production performance and customer-related performance in Giad Companies. Submissions document investigations were carried out to ensure the information accuracy, validating the outcome of analysis and developing an understanding of practical aspects of EFQM principles adoption.

To enable respondents to indicate their answers, five – point interval scales were used for the questionnaire.

This study involves collection of two types of data namely primary data and secondary data, analysis and interpretation for meaningful finding and Conclusion will be carried out similar to Koilakuntlaa, et –al studies.

In (2012).

Primary data will include questionnaire cover the impact of implementation of excellence model on the following factors:

1) The systems and procedures applied

(2) The organizational culture

(3) The structure and design of the organizations

(4) The managerial and employees recognition of the importance of quality and attitudes towards it.

(5) Costs of quality (internal & external failure) resulting from not maintaining a certain quality level.

We had designed about seven questions for each factor in a separate table to ensure the impact of implementing the excellence model on those factors. (Appendix 1). Then by default the accumulation will ensure the impact of EFQM excellence model implementation on the organizations performance,

The EFQM model is a framework, it has no given approaches for organizations to implement but it can advise organizations to implement some approaches already build in other systems and tools like ISO standards, balanced scorecard, quality tools and etc.

For example the International Organization for standardization (ISO) in ISO9001-2008 standard,( parag 0.3) Relationship with ISO 9004, indicate that" ISO 9001 specifies requirements for a quality management system that can be used for internal application by organizations", this phrase "quality management system" exactly what we mean in our first question in the questionnaire.

Our philosophy behind these questions is, to linked between the excellence model implementation through its sub criterion and the systems and procedures (questions 1 to 7) and to linked between the model sub criterion and polits that emphasized on organization culture and quality culture (questions 8 to 14) and etc. for the rest of our factors (design of the organization, the managerial and the cost of failures) respectively.

We seeks to prove that these sub criterions had been implemented properly through answers with agree and strongly agree in our questionnaire, because each one of these factors has direct impact on organizations performance,

Taking into consideration that these factors are the element of the organization performance. Secondary data will include references and published papers related to topic, mainly from science direct journal and other theses contain PhD. and MSC. Theses, these will be cover later in chapter two.

### **1-f Research purpose:**

This research aims to answer the main question, is the implementation of EFQM excellence model has impact on the organizations performance? Through achievement of the five objectives. The researcher started collecting data by a questionnaire to ensure the good implementing for the model and supporting the questionnaire by the submission document data. SHG. Had been participated in six cycle of excellence awards from 2007 to 2013, and the enablers score had been recorded to demonstrate the positive trend of the result from year to year.

### **1-g Research Strategies:**

According to Ismail May 2012 a research strategy is a blueprint which the researcher will use to answer specific research questions, by specifying the sources the researcher will use to collect the required data and considering the constraints during data collection process, such as location, time, access to data, ethical issues and money. There are many research strategies which are firmly rooted in a deductive approach, while others are in an inductive approach such as Experiment, case Study and Grounded theory. The focus of this research is not to what approach one strategy is attached, but whether it is the appropriate strategy to answer the research questions or not. Taking into consideration the advantages and disadvantages of each strategy. We use survey strategy and, thus, data are often obtained by using a questionnaire as one method of data collection; however, it is not the only data collection method that belongs to this strategy. Structured observation and interviews also belong to the survey strategy. But we focus mainly on questionnaire because the research is limited.

### **1-h Data collection (Primary data).**

The questions in our questionnaire are selected from the sub-criterion of the enablers of EFQM excellence model, 2013 (1a, 1b, 1d, 1e, 2d, 3b, 3c, 3e, 4b, 4e, 5a, 5b, 5d and 5e). Which had direct or indirect relation with our hypotheses? The positive answer for these questions refers to positive impact for implementation of EFQM model on hypotheses while the negative answer indicates negative impact.

All these questions (34 question) had been in one questionnaire categorized into five group each one refer to one hypotheses sequentially, these questions divided in to five scales rating from (5 to 1) see Appx1. For statistical analysis purpose it had been 5 for (strongly agree) and 1 for (strongly disagree). The respondent should only draw a tick (√) on his/her favorite suggestion. Questions are formulated in away to avoid close questions and to give multi choice answers. Our questionnaire had been translated to Arabic by the author with additional explanations in order to be understood. (APPX-2) The questionnaire was audited by three doctors to ensure that questions are clear and will answer our hypotheses. (APPX-4) We targeted 65% of top managers, 16% of line managers and supervisors, and 10% of the technicians and labors.

For further reliability on our results, addition investigation and home work on document was carried out (submission document) for participation of SHG. In chairmanship of republic excellence award (2007), and Giad excellence award for the years (2009, 2010, 2011, 2012 and 2013).

#### 1-i Data analysis:

The data analysis is a necessary stage after the collecting primary and secondary data. This stage mainly focuses on transferring the questionnaires results into useful and reliable information and making sure that the collected data achieve the research objectives and answer the research questions. However, presenting and analyzing research data is not the end of any research because the researcher still needs to develop a link back to the theoretical and practical problems by interpreting the qualitative and quantitative results and findings. Ismail, (2012).After collecting data through our questionnaire, SPSS version 20.0 used to analyze data, this is a computer program called Statistical Product and service solution. The results presented in form of frequency and percentages.

Also Reliability Analysis – Scale (ALPHA) was used. The results presented in form of Chi-value, P-value, Median and S.D (standard deviation) we used reliability analysis to ensure the quality of a measurement procedure that provides repeatability and accuracy. And Microsoft Excel 2007 program was used to form the important graphs.

## **Theme two: previous studies**

### **2-a Loiy Bani Ismail studies (2012):**

The study's focus is on investigating TQM in large and medium sized construction companies in the United Kingdom and Jordan. Thus, this research began with an extensive literature review. A large number of academic journals, construction industry journals, books, reports and theses were reviewed, documented and analyzed.

The findings showed that TQM implementation is important for the construction industry in some countries such as the United Kingdom, the USA, Japan, Singapore and Australia but, at the same time, it cannot be generalized to all countries and all construction projects, which led to the following question:

- Is the TQM approach important for all construction companies and to what extents will the successful implementation of TQM improve company competitiveness?
- How can the developed and developing countries use TQM through their managerial and operational processes to improve competitiveness and sustainable growth?

This research is based on a comparative investigation of TQM in the UK and Jordan, from different perspectives and, therefore, the researcher had to focus on contractors, clients and final user point of views.

In order to collect the required data, there are two types of primary data used for this research for the specific purpose of addressing the problem at hand. Primary data may be Quantitative or Qualitative data, the position taken by researchers regarding the relative merits of quantitative and qualitative strategies of research varies considerably, from those who see the two strategies as entirely separate to those who mix these strategies within their research projects. However, the mixed methods research approach allows researchers to be more integrative, flexible and holistic in their investigative techniques, as they strive to address a range of complex research questions that arise.

Therefore, this study has combined quantitative and qualitative data techniques to gather the required data, by using the Hybrid Survey (self administrated and interviewer-administrated questionnaires) as the quantitative data technique and the individual face-to-face in-depth semi-structured interview as the qualitative technique.



The main aim for conducting this research is to contribute to the understanding of TQM in UK construction companies to provide recommendations to Jordanian construction companies. Investigating whether TQM implementation is important for all the UK construction companies will assist in how it can be implemented in the Jordanian construction companies to improve competitiveness and sustainable growth and compete with international construction companies operating in the Jordanian market.

To achieve the research aim, five objectives are developed:

- To investigate whether all construction organizations require a TQM system or if they have adopted a different system to provide constructive recommendations to support and improve TQM implementation and control in the Jordanian construction sector by investigating TQM practices and implementation in the United Kingdom.
- To define the CSF's (critical success factors) for the construction industry, as managers and experts have not agreed yet how to apply TQM tools and techniques to their organizations, in addition to having different CSF's for each construction project.
- To define the external environmental factors and obstacles which affect the TQM implementation within the construction industry?
- To explore the benefits of acquiring a TQM system within an organization.
- To measure the impact of the independent variable TQM CSF's on the dependent variables (profitability, market share, performance and quality services). The data were divided into the research objectives, respectively.

Each objective was clearly presented by discussing the relevant question and data collected by the respondents.

However, analyzing this data has required further statistical analysis; thus, the researcher studied many statistical analyses to understand and find out the most appropriate analysis to be used. Cronbach's Alpha was used to measure internal consistency and showed that the questionnaire has relatively high internal consistency with .977.

Moreover, Independent sample T-Test analysis was used to compare sample means and to find out if the means of the two sample distributions differ significantly from each other.

Multiple regression analysis was used to test the independent variable effects on the dependent variables and to calculate P-values, T-values, F, R, and . The result indicates that the TQM implementation in the UK is significant and has an impact on improving competitiveness in terms of profitability, market share and quality services, while in Jordan, the results show that TQM implementation is significant and has an impact on improving competitiveness in terms of market share, but it has no impact on improving profitability and quality services.

Thematic approach was used to analyze the interviews, based on decoding the collected data and grouping it according to its relevance in relation to TQM CSF's and then analyzing it for decoding again.

The results revealed that TQM success factors were proved statistically and clearly identified after identifying their effects on the dependent variables. These factors are top management commitment, quality culture, process planning and strategic quality management, employee empowerment, employee training and education, supplier chain management, customer satisfaction, information and communication technology, continuous improvement, performance measurement system for benchmarking and impact on society and environment. The results show that in the United Kingdom, all employees agreed that their organizations have developed a clear definition of quality and they are all aware of quality systems.

Results show that 63.5% said that a quality improvement program has been a part of corporate policy for some time and had the support of top management to improve quality. The results show that Jordanian construction companies have not developed a clear definition of quality and the majority of employees are not aware whether their organization has applied a quality system or not. Moreover, the majority of employees (75.2%) said that their organizations do not have a quality improvement program and they lack the commitment of the management. The benefits of a TQM system, according to the Jordanian respondents, is based around financial improvement, while in the UK, the benefits are more related to customer satisfaction and defect reduction. Therefore, TQM implementation in Jordanian construction companies is still profit driven rather than client driven. The main problems facing TQM implementation in the UK is related to the current economic recession. In Jordan, employees and managers stated that their management reliance on quality process inspection rather than the quality of the final projects and the high level of centralization is considered as the main impediments of TQM system implementation. In general, the respondents stated that dealing with defects, customers complaints and rework costs organizations a lot of money and damages organization reputation and confidence in their employees and their system; therefore, a TQM system is perceived to be more beneficial to the construction companies.

University of Huddersfield Repository

Bani Ismail, Loiy (2012) an evaluation of the implementation of Total Quality Management (TQM) within the construction sector in the United Kingdom and Jordan. Doctoral thesis,

This version is available at <http://eprints.hud.ac.uk/14055/>

## **2-b Avazpour, et-al studies, (2013):**

To accomplish the objectives of the project, 4 main hypothesis and 36 sub-hypotheses based on the relationship between organizational culture from the perspective of Richard L. Deft (including 4 culture types of flexibility, functionality, participatory and bureaucratic) and excellence performance based on EFQM model (including leadership, policy and strategy, staff and human resources, participations and resources, customer results, staff results, society results and results of key performance. Considering the objectives and subject, the current study is a survey and library method research in terms of data collection, applied in terms of purpose and Co relational or compatible in terms of methodology.

- 1st main hypothesis-There is a positive and significant relation between Flexible culture and excellence performance based on EFQM model in medium and small firms of industrial town in Bandar Abbas
- 2nd main hypothesis-There is a positive and significant relation between Mission culture and excellence performance based on EFQM model in medium and small firms of industrial town in Bandar Abbas.
- 3rd main hypothesis-There is a positive and significant relation between Participant culture and excellence performance based on EFQM model in medium and small firms of industrial town in Bandar Abbas
- 4th main hypothesis-There is a positive and significant relation between Bureaucratic culture and excellence performance based on EFQM model in medium and small firms of industrial town in Bandar Abbas. To investigate the four main hypotheses mentioned above, the relation of four types of cultures with different EFQM dimensions was analyzed. Thus, the relation between different types of cultures and the leadership, policy and strategy, staff and human resources, participant and resources, processes, customer results dimension, shows that the existence of an appropriate organizational culture and investing on this feature, will lead to the improvement of excellence systems. Considering the objectives and subject, the current study is a survey and library method research in terms of data collection, applied in terms of purpose and co relational or compatible in terms of methodology. The statistical population of this project is among all managers, deputies and experts working in medium and small firms located in the industrial towns of Bandar Abbas which are, according to the statistics of small industries in 2011 and the annunciation of the relevant officer, 83 firms and 243 managers, deputies and experts working in these firms.

According to their activity type, these firms were divided to 8 groups: Food, chemical, metallic, Cellulose, power and electronics, textile, non-metallic minerals and service industries. Cochran formula is used to determine sample size. Accordingly, the obtained sample size is 152 managers, deputies and experts. To ensure the collection of questionnaires, 160 questionnaires were distributed which were later collected and analyzed. In order to collect the required data for the study, 2 questionnaires were used. Questionnaire (A), which has been used for understanding of different types of organizational culture, consists of 19 questions. This questionnaire, assess different types of organizational culture in the forms of flexibility, functionality, participation and bureaucratic and is designed in the form of questions with 5 alternatives (which are totally agree, agree, partly agree, disagree, totally disagree).

Questionnaire (B), which has been used for assessment of excellence performance based on EFQM model, consist of 50 question and is designed in the form of a four-grade scale weight (including totally exists, it has considerable progress, it has a little progress and not started yet).

To determine the validity of the study, the questionnaires of organizational culture and excellence performance based on EFQM model, along with the subject and hypothesis of the study were presented to 5 management professors and experts to comment on the suitability of the options and their appropriateness with the hypothesis.

To describe the collected data in this study, methods of descriptive statistics such as tables, frequency graphs and frequency histogram for primary and secondary variables were used and Pearson correlation test was used to determine the correlation. All the statistical analysis of this study has been conducted by SPSS software. After analyzing the research data, it was determined that there is a positive and significant relation between dependant and independent variables in main hypothesis. Also, it was affirmed that there exist such relations in secondary hypothesis. A conclusion from statistical calculations of this study shows that there is a relation between flexibility culture and excellence performance based on EFQM model. In a world with changing environment, excellent organizations are consistently and quickly agile, flexible and responsive to the changing needs and the expectations of the stakeholders. The statistical calculation shows that there is relation between mission culture and excellence performance based on EFQM model. Studies found that most important feature of organizational culture is its mission. Those organizations that do not know where they are and what their existing situation, often is go astray.

Successful organizations have a clear understanding of their goals and directions, so that their organizational goals and strategic objectives are defined and the prospects are outlined.

The statistical calculation shows that there is relation between participation culture and excellence performance based on EFQM model. Prominent organizations, improve all their potential of human resources at the individual, team, organizational and management levels and benefit from it. They promote fairness and equality and have their staff participate in the affairs and empowered.

These organizations support their staff, communicate with them and encourage them; so that these lead to their encouragement and commitment for increasing their skills and knowledge and using them for the interests of the organization. Statistical calculation shows that there is relation between bureaucratic culture and excellence performance based on EFQM model. Previous studies believe that well integrated organizations are difficult to change. Hence, the integration can be an advantage to take into account for the organization.

Studies found that after 6 years of study and comparing 18 firms with successful backgrounds with 18 firms not much successful, conclude that the culture is the most important determinant of success is an organization. A culture where the staff and senior managers, are concordant and have a strong vision of the future for the company and wish the success of the company with all the heart. These studies realized that successful companies have a ‘main or central idea’, value the special values and determine the staff behavior on the same basis.

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## **2-c Cetin1, et-al studies, (2012),**

The purpose of this study is to explore the effects of EFQM Excellence Model on the intrapreneurship behaviors in the organizations. We have selected different organizations one of which is performing the EFQM Excellence Model to compare their employees' intrapreneurial behaviors.

Organizations should take into account the intrapreneurship implementation as a method of improving innovation for the competitive advantage.

Previous studies proposes some freedom factors", which are correlated with the organizational context, as incentive for the intrapreneurial practices. These freedom factors are: self-selection, no hand-offs, featuring the doer decision or determination, flexible access to time and organizational resources, ending the home-run philosophy, showing tolerance of risk, failure and mistakes, willingness of the organization to commit monetary resources to innovation projects, another study add further innovation success factors: empowerment of intrapreneurs, supporting the intrapreneurs, sponsoring innovation by mentoring and coaching, strong organizational community, focusing on customers, measuring innovation needs, transparency and truth in support of the free-flow of information, good treatment of people, and social, environmental, ethical responsibility.

Moreover propose seven excellence criteria for promoting intrapreneurship behaviors in the organizations. Ultimately, all of these structural, contextual and cultural factors play significant roles for the intrapreneurial behaviors in the organizations. With this regard, EFQM Excellence Model as a frame of reference of management system may influence many applications of the organizations. The participants in the present study comprised 298 teachers from three schools in Turkey. One school is in Bursa, and the other ones are in Ankara and Istanbul.

All of the schools are Vocational and Technical High Schools. Sample-1 represents the school in Bursa that implies the EFQM very successfully. Sample-2 is the school in Ankara and Sample-3 is the school in Istanbul both of which are not applying any quality model. When we examined the demographic structure of the schools, no significant difference was addressed. Questionnaires were distributed by the researchers to every participant in different sessions in all of the schools. The evaluation of EFQM Excellence Model was not conducted by the researchers, but instead the evaluations of the National Quality Award Jury were taken to consideration. The school located in Bursa, achieved Recognized for Excellence 5-Star in 2009 and received the National Quality Success Award in 2009.

The other schools in Ankara and Istanbul have ISO 9001:2000 Quality Management Certificate but do not apply EFQM Excellence Model.

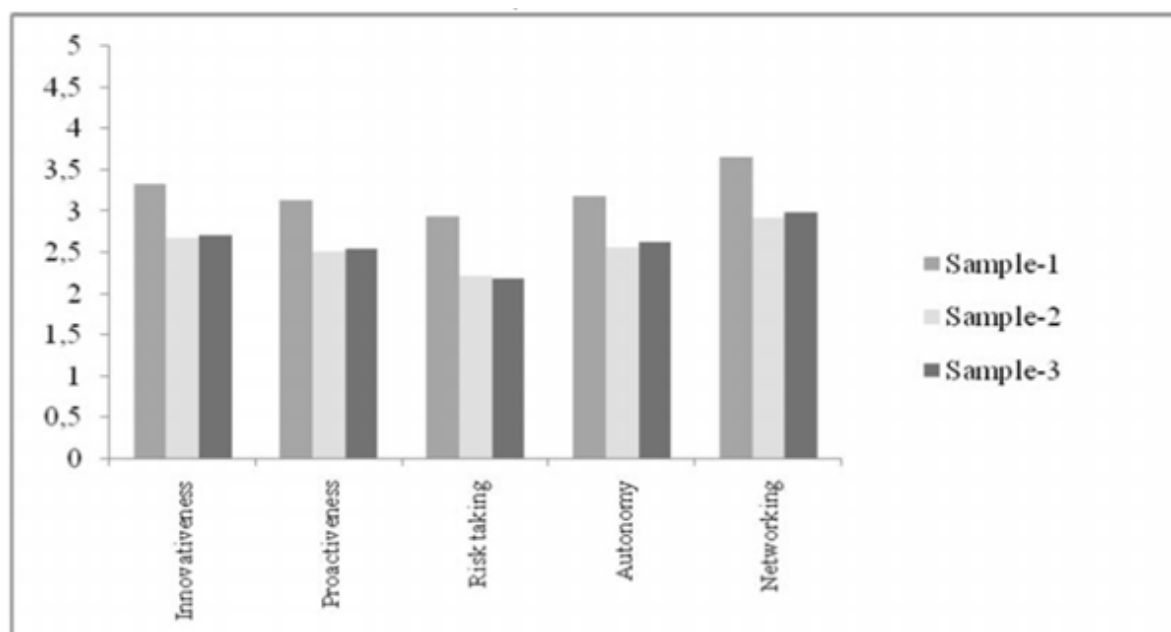
Intrapreneurial behaviors of the students were measured by a 22-item scale.

The scale designed to measure the intrapreneurial behaviors on five dimensions named as innovativeness, proactiveness, risk taking, autonomy, and networking. Each item was answered via a five-point.

To ensure the construct validity of the scale, confirmatory factor analysis (CFA) was conducted. The mean scores of the dimensions of intrapreneurship scale were given in Graph 1 separately for each sample, in all dimensions.

This result indicates that there is a significant difference between the school performing EFQM Excellence Model and the schools that do not in the mean scores of the intrapreneurial behaviors.

*Graph 1: intrapreneurship scores of the samples*



Sorsuce: Cetin1, et-al studies, (2012),

One way analysis of variance (ANOVA) was conducted to determine whether there is statistical significance in the intrapreneurship behaviors scores among Sample-1, Sample-2 and Sample-3.

The findings demonstrated that Sample-1 and the other samples differ significantly for all intrapreneurship behaviors. Moreover, while the means of Sample-1 were relatively increased, we could not find any mean difference between Sample-2 and Sample-3. This evidence demonstrated that the main cause of displaying more intrapreneurship behaviors is result from not something else but depends on the EFQM Excellence Model applications in the schools.

The results obtained show that the intrapreneurship behaviors are higher in the school using EFQM Excellence Model.

All organizations should apply and follow a suitable excellence model which leads them toward innovative behaviors. It is the management responsibility to establish such an innovative culture in the organizations with norms and values. The innovative culture is the result of long term careful thinking, reflection, planning, measurements and follow-up from top level to projects and process level. One of the methods for creating an innovative culture in the organizations is the EFQM Excellence Model.

This model is designed for all kinds of organizations and helps organizations to identify their weaknesses, strengths and areas of improvement.

The results of this study showed the evidence of the significant relationship between EFQM Excellence Model and intrapreneurial behaviors in the organizations. We found that the EFQM Excellence Model applications have positive impact on the intrapreneurship behaviors of the employees.

These findings indicate that organizations that have adopted the EFQM Excellence Model are more inclined to implement these intrapreneurial practices. Our results are also interesting for managers who are applying the EFQM Excellence Model to improve the innovative behaviors of the employees.

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Exploring the Effects of EFQM Excellence Model on the Process of  
Intrapreneurship: A Research from Turkey

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## **2-d Nguyen thi hoang lien studies, (PhD, 2010)**

The main aim of this research has been to evaluate whether the use of an appropriate SA (Self-assessment) method based on the BEM (business excellence model) leads to benefits which may improve effectiveness in the Vietnamese T&G(textile and garment) industry.

In pursuit of this aim, there are a number of objectives of this research:

(i) To evaluate the usefulness of the BEM using the self-assessment approach in Vietnamese enterprises.

(ii) To explore implementation issues associated with self-assessment in specific contexts.

(iii) To suggest an appropriate self-assessment approach and implementation strategies suitable for Vietnamese organizations based on the research findings. Building on the main aim and objectives of this research, the main research question is:

‘How useful is self-assessment using the business excellence model for Vietnamese organizations?’

In order to clarify the explorative research question, the author chose the interpretive paradigm to conduct this research. An interpretive approach seems to be the most suitable paradigm whenever a researcher intends to conduct an inductive work with a conceptual framework within a small sample of cases. In the first stage of this study, SA literature is examined to determine the relevant knowledge that has been published in the field. Intentionally, this review has emphasized two SA tools: the questionnaire and the award application, which are the most related to the purpose of the current research. Furthermore, the inductive evaluation of the topical range includes the benefits, difficulties and critical success factors of the SA process; helping to develop a conceptual research framework. Based on the review of SA literature, the EFQM questionnaire was selected for application in the Vietnamese business context.

The application of SA in this study needs to be evaluated in the context in which it takes place. Case studies were seen as the most appropriate method for this study. The Vietnamese T&G industry is the subject area considered in this research, as this sector is one of the largest export revenue earners in Vietnam, and has recently been experiencing strong competition as a result of WTO integration.

Case studies were selected as main research strategy and two Vietnamese T&G companies were chosen to apply the EFQM SA questionnaire.

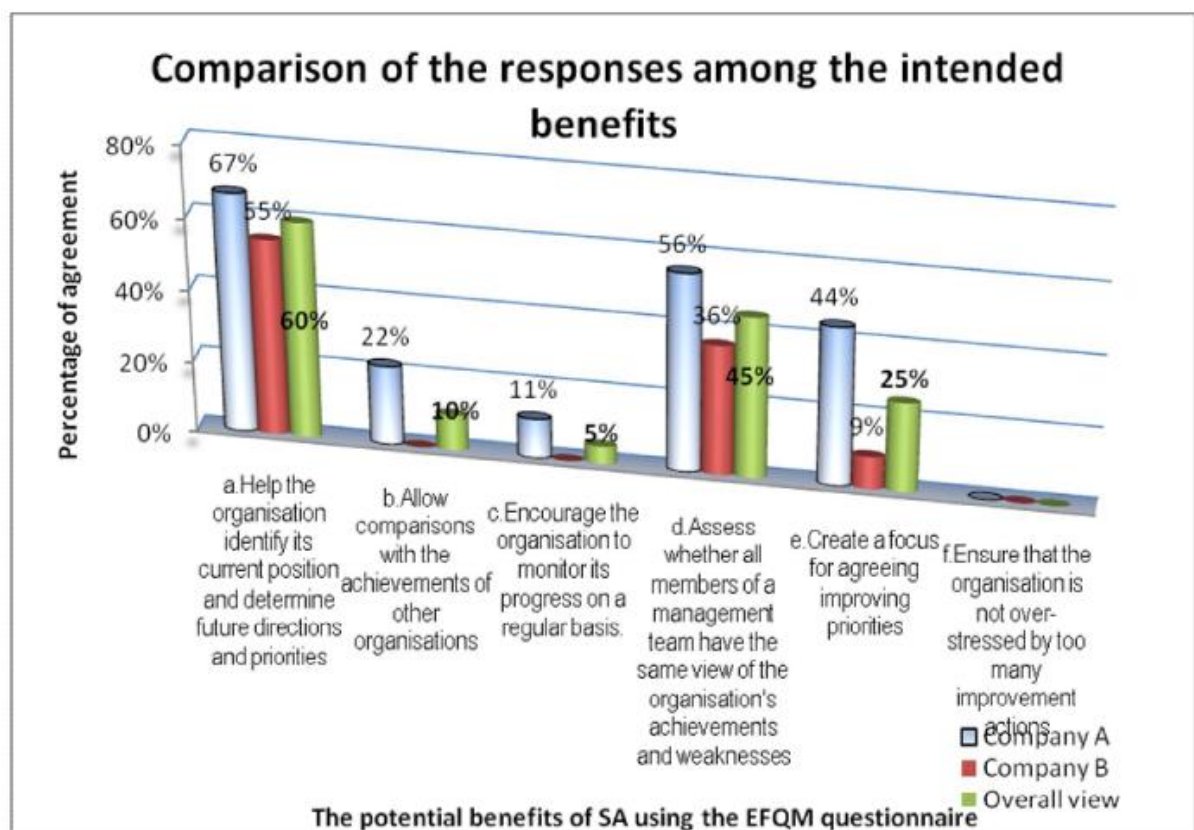
Data was gathered from two sources: semi-structured interviews and outcomes of SA using a questionnaire approach.

In this study, data analysis from SA outcomes was used as a foundation for further qualitative analysis. Specifically, the SA results were numerical findings obtained from the EFQM SA process, but descriptive data obtained by interviewing senior managers was the primary source of data.

The main analysis tool used in this project for qualitative interview data analysis was a combination of template analysis and qualitative data analysis software NVivo 8 (QRS, 2008). The reason for employing this was to gain credibility through the analysis of large quantities of rich data. To illustrate respondents' agreement on specific intended benefits of SA- FQM, Figure 2 shows the results of the two companies.

Figure 2. A comparison between Company A and Company B of the intended benefits obtained from SA-EFQM implementation.

Figure 2: the potential benefits of SA using the EFQM questionnaire



Source: Nguyen Thi hoang lien studies, (PhD, 2010)

As can be seen in this figure, five out of six intended benefits mentioned in the questionnaire were confirmed to have been recognized in the two companies.

Significantly, it can be identified that benefit a (Help the organization identify its current position and determine future directions and priorities) was actually the most agreed upon (60%).

Next, benefit d (Assess all members of a management team have the same view of the organization's achievements and weaknesses) had 45% agreement.

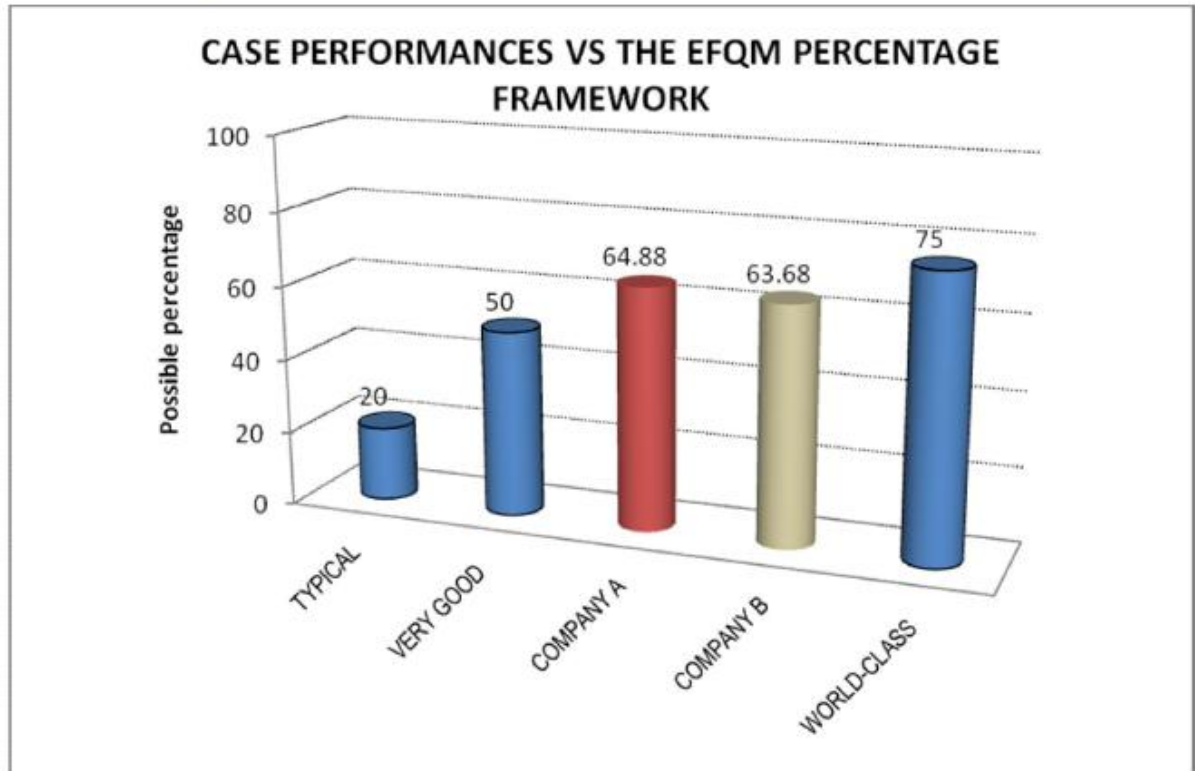
Thirdly, benefit e (Create a focus for agreeing improvement priorities) was indicated by 25% of respondents.

Conversely, confirmation of benefit b (Allow comparison with the achievements of other organizations) and benefit c (Encourage the organization to monitor its progress on a regular basis) was offered by few managers. Surprisingly, neither company confirmed benefit f (Ensure that the organization is not over-stressed by too many improvement actions).

In general, the benefit of SA-EFQM of helping the company identify its current position and determine future directions and priority was confirmed by 67% in Company A and 55% in Company B (see Figure 6-1). However, details of evidence showed some disagreement.

The administration of SA using the EFQM approach has provided overall scores of each case company. This overall performance (overall score) of the organization was compared with the score scheme provided by the EFQM in order to pinpoint its position. Based on the organizational score, the business is ranked at a particular degree on the excellence roadmap. The quantitative SA-EFQM results of both Case A and Case B regarding organizational average score was 64.88% and 63.68% respectively (see Figure 3).

Figure 3. The position of case companies against the EFQM questionnaire framework



Source: Nguyen Thi hoang lien studies, (PhD, 2010)

In general, the result of the EFQM SA questionnaire is evidently contributed great emphasis to support a company in improvement planning.

Hence, a company can use this information for its improvement plan, particular in Vietnam.

However, in regards to all the benefits gained by the two companies, the two benefits in benchmarking of the SA tool, especially in pinpointing an organization's position, and organizational strengths and weaknesses, could be less reliable because of the measuring problem in scoring.

Bearing in mind the plethora of BE-based SA approaches (questionnaires, matrix and award simulation/application) used in Western countries, the researcher specifically chose the simple and less resource-demanding EFQM SA questionnaire, which is often used as a preliminary tool of SA.

Although the two companies had experience of SA implementation and acknowledged the business excellence concept through VQA (Vietnam Quality Award) application, the application of the EFQM tool can be seen as a unique opportunity for the Vietnamese organizations to employ a more appropriate SA tool, owing to their immature levels in quality management. In other words, this evaluation activity shows whether BEM-based SA implementation works in the Vietnam context. The similarities and differences in perceptions between management groups measuring the achievement of the SA activity were reflected upon using the interview data. Together with the primary findings which relate to the three research objectives of the current study regarding the usefulness of the EFQM SA questionnaire for Vietnamese organizations.

## **2-e Salih Yesil a\*, Ahmet Kayab, 2013:**

The relationship between organizational culture and firm financial performance is explored in this study. Theoretical and empirical studies seem to support this argument as explained below.

Theoretical arguments support the idea that organizational culture is related to organizational performance and long term effectiveness some studies in 1988, 2006 and 2010 argued that organizational culture is one of the key organizational assets that have been studied extensively in association with organizational effectiveness.

Empirical studies also provide the evidence of link between organizational culture and organization related performance outcomes. In (2004) reported that culture was found to impact a variety of organizational processes and performance.

The strength of cultural values was found to be correlated with the organizational performance of firms in a few cases. For example, it was correlated with return on assets in manufacturing firms, growth in annual premiums and sum assured in insurance firms. There were no significant correlations with hospital performance.

There are also some studies revealing the evidence regarding what types of organizational cultures affect performance outcomes, in (2000) reported that competitive and innovative cultures are positively related to organizational performance. They also found no relationship between organizational performance and bureaucratic and community cultures. Taking in account these studies and others the following hypothesis is suggested;

H1: Clan culture positively influences financial performance of the firms.

H2: Adhocracy culture is positively related to financial performance of the firms.

H3: Market culture is positively associated with financial performance of the firms.

H4: Hierarchy culture negatively affects financial performance of the firms.

The participants in this study consisted of managers from fifty four firms. The firms are located in Gaziantep city of Turkey. There are approximately 1000 firms and maybe more registered at Chamber of Commerce of Gaziantep. We were able to reach the contact information of around 300 firms and sent them the questionnaire via mail or personal contact. Fifty four usable questionnaires were returned with an 18% response rate.

The questionnaire items were derived mainly from previous studies and modified to fit to the nature of this study. The information regarding financial data was obtained from the companies through personal contact.

The necessary calculations were made by the researcher later on to use in the analysis. A likert type scale with five response options ranging from strongly disagree to strongly agree was used for measuring organizational culture. All analyses were performed by using SPSS program with regression and correlation analyses.

The firms surveyed in this study operate in textile sector (%47), food sector (%33), service sector (%13) and others (%7).

The results of the factor analysis are depicted in Table 1. Kaiser-Meyer-Olkin Measure of Sampling Adequacy (662), seem to be a low value probably due to sample size. Considering the time limitations, there was no chance of increasing the sample size.

For each of the factor that has been destructured from the main data are as follows: clan culture, adhocracy culture, market culture and hierarchy culture. Some of the items were left out from the analysis because these items were loaded in the analysis on more than one factor.

Table 1: Results of factor analysis of organisational culture

	Factors			
	Factor 1	Factor 2	Factor 3	Factor 4
Clan culture related item 1	<b>,807</b>	-,013	,200	-,107
Clan culture related item 2	<b>,801</b>	,215	,032	,241
Clan culture related item 3	<b>,717</b>	,372	,123	,190
Adhocracy culture related item 1	,258	<b>,805</b>	,030	-,074
Adhocracy culture related item 2	,070	<b>,860</b>	,056	-,018
Adhocracy culture related item 3	,091	<b>,664</b>	,080	,216
Market culture related item 1	,158	,345	<b>,586</b>	-,067
Market culture related item 2	,223	-,055	<b>,865</b>	,160
Market culture related item 3	-,261	,173	<b>,460</b>	,241
Hierarchy culture related item 1	,287	,332	-,248	<b>,555</b>
Hierarchy culture related item 2	,232	-,184	,003	<b>,745</b>
Hierarchy culture related item 3	,038	,242	,175	<b>,474</b>

Extraction Method: Principal Component Analysis, Rotation Method: Varimax with Kaiser Normalization

Source: 1st World Congress of Administrative & Political Sciences (ADPOL-2012)

In addition to the factor analysis, correlations among the main variables of this study were also performed.

To test the hypotheses of this study, the regression analysis was performed in two steps, Control variables were entered during the first step, and the main independent variables were added in the second step. The results were insignificant, leading to reject hypotheses (H1, H2, H3, and H4).

These results mean that organizational cultural dimensions have no significant effect on sales growth and ROA.

Although it is hypothesized that organizational culture dimensions (except hierarchy culture) are positively related to financial performance outcomes, our study failed to show such relationship.

In order to see whether there are differences in terms of performance outcomes among the clan, adhocracy, market and hierarchy cultures, One Way ANOVA was conducted and the results were also insignificant leading to conclude that there is no performance differences between companies with different organizational cultural background. The inconsistent findings from the empirical studies concerning the relationship between culture and performance have been raised in the literature. This prompted the researchers to undertake an empirical study to further investigate the effect of organizational culture on performance outcomes in a developing country. The hypotheses were developed from the related literatures and tested based on the data collected from the firms operating in Gaziantep city of Turkey. Hypotheses testing results reveal that none of the organizational culture dimensions (Clan, adhocracy, market and hierarchy) are related to firm financial performance (Sales growth and ROA). Although culture dimensions (except hierarchy) were hypothesized to positively affect financial performance, the relationship was not confirmed in this study based on correlation and regression analyses results. These results mean that our hypotheses H1, H2, H3, and H4 are rejected. There are some limitations in the study that need to be taken into account when evaluating the results. One limitation is that participated firms in the current study come from firms in one city with relatively small sample size. Therefore, this creates barriers to generalize the findings to the other contexts. It is then recommended that further studies may involve relatively big sample, including other cities.



## **Chapter two: Literature review**

- 1- Theme one:** Concepts and Revolution of quality.
- 2- Theme two:** The evolution of EFQM Excellence Model.
- 3- Theme three:** The Radar & acceptability of the model.

## **Chapter two: Literature review:**

### **1- Theme one: Concepts and Revolution of quality**

#### **1-a Concepts of quality:**

As a matter of fact, many valuable authors and experts, such as W. E. Deming, J. M. Juran, A. V. Feigenbaum, K. Ishikawa, P. B. Crosby, D. Garvin, and etc. contributed to the evolution of quality concept. There are many definitions of quality as stated by gurus of quality. Crosby in his first absolute (2004) defined quality as: conformance to requirements. This definition assumes that the specifications and requirements have already been developed and then there should be a conformance to these requirements. While Juran in (1979) said, Quality is fitness for use. In this definition Juran address the importance of the customer who will use the product. Deming, (1986) as cited by UZUN and ÇAĞLAR, (2005) defined quality as follows; Good quality means a predictable degree of uniformity and dependability with a quality standard suited to the customer. The underlying philosophy of all above definitions is the same – consistency of conformance and performance, and keeping the customer in mind. Another popular definition stated by the American Society for Quality (ASQ): Quality denotes an excellence in goods and services, especially to the degree they conform to requirements and satisfy customers. This definition assimilates the all above definitions.

#### **1-b Revolution of quality:**

The history of quality is as old as civilization. The Harappans of the ancient Indus Valley civilization (3000 BC) achieved high precision in the measurement of length, mass, and time. The quality movement maybe traced back to medieval Europe. Craftsmen began organizing into unions called guilds in the late thirteenth century. Manufacturing in the industrialized world followed the craftsmanship model throughout the eighteenth century. The factory system, with its emphasis on product inspection, started in Great Britain in the mid-1750s and grew into the industrial revolution in the early nineteenth century. In 1798 Eli Whitney introduced the concept of producing interchangeable parts to simplify assembly. Chandrupatla (2009).

In the early 1900's, Frederick Taylor, founder of the "Scientific Management" movement, promoted his "one best way" method as a set of scientific principles to measure the efficiency and productivity of any given task (1911, 1947). His approach had a strong impact on managerial practices in America during that time. Ho, (2011).

In the last century the first stage of quality reflects the inspection phase. In 1920s, controls expanded through processes and inputs, and productions started to become standardized. This phase is named as statistical quality control era. In 1960s, after the Second World War, statistical methods were improved and the integration of production with quality notion is acknowledged. This stage would be referred as the quality assurance phase. At that time, Japan was having a tough period, trying to recover from the war's destruction. Aiming to revitalize the country's industry, the Japanese defined the quality in a new way (a promise to the customer) and they realized that all components of the organization, including workers, should be engaged to this process. In 1980s, Japanese production system was such successful that it became a model for high quality around the world. Then, this last stage defined the total quality approach. Lake and Mohanty (1993) in their research (Total Quality Management Concepts, Evolution and Acceptability in Developing Economies) stated the following definitions for total quality management: Total Quality Management (TQM) is an approach to improving the effectiveness and flexibility of business as a whole. It is essentially a way of organizing and involving the whole organization; every department, every activity, every single person at every level. Second definition for (TQM) is: Total Quality Management is the combination of the socio-technical process towards doing the right things (externally), everything right (internally) first time and all the time, with economic viability considered at each stage of each process. Rodriguez and Álvarez, (2014) stated that Total Quality Management is a business management system focused on continual process improvement and the satisfaction of customer needs. Employee involvement in continuous improvement, the use of data and effective communication are also important characteristics of TQM.

Total Quality Management is a management organization focused on quality, based on the participation of all its members and aiming at long term success through customer satisfaction and benefits to all members of the organization and society as a whole (Stanciu and Condrea, 2014 ).

Total Quality Management is a mindset that needs to be established in an organizations core if it is to be successful, at all levels in all departments, a mindset of quality management and continually improving should be primary, when expanding and developing as a whole organization, new challenges would be dealt with in the most efficient way. But also at all levels tools and techniques should be clear to the users, goals and standards should be set out in an attainable fashion and everything should be traceable through feedback to analyze what happened and how it could be improved.

Quality within the organizations processes and employees should also be recognized and promoted as a distinguishing factor. Loughl (2008). Also Oluwatoyin & Oluseun, (2008). Stated that TQM is an ideology which is focused on the satisfaction of customer's need? Thus, most organizations try as much as possible to meet or exceed customer's expectation in their daily activity and also their long term plan. Lakhe and Mohanty (1993) found that TQM approach differs from traditional management in the following ways:

- (1) TQM focuses on customers absolutely.
- (2) "Products conquer markets" is the basic edifice of TQM.
- (3) TQM takes the view that profits follow quality
- (4) TQM views total quality as having multi-dimensional attributes.
- (5) TQM creates goal-directed connections between customers, managers and workers.
- (6) TQM is process-oriented, as against the traditional result-oriented approach.
- (7) TQM favors a long span of control, with authority pushed down almost to the lowest level.
- (8) TQM requires a multi skilled workforce with job rotation, in contrast to division of labor.

The fast growing changes in the organizations have resulted in the need for quality management systems which led to developing various quality models, since different awards were devoted to the best models, many models developed. Deming Prize was one of the first models that were conducted in Japan 1951 which was developed by the board of Directors of the Japanese Union of Science and Engineering.

The USA's Malcolm Baldrige Award (MBNQA) introduced in 1987 was the other famous model, whereas the European Foundation for Quality Management (EFQM) model was developed in the western world in 1991. Many countries have developed and adopt national quality awards to achieve outstanding business results. These awards encourage the increase of Productivity, improvement of the strategic planning and provision of a role model for other businesses, (Krittathipa et-al, 2013) In today's turbulent global environment, organizations need to increase their competitiveness, a

TQM model can be clearly used as an instrument to acquire and keep a leader position if it is properly implemented; a TQM model provides a framework for assessing organizational performance. Thus, the model guides organizations in achieving better results by indicating areas of improvement - Rodrígueza \*, Álvarezb (2014). Despite usefulness of the self assessment concept and wide recognition of quality awards, there is a debate over the assumption which claims they prove organizational success. However Self assessment allows an organization to measure the situation it is in relative to its target excellence position.

The notion Business Excellence, currently so frequent subject of discussions of executive bodies and management representatives, has occurred at the beginning of 1980s within the intensive discussion between American government experts, scientists and industrialists for the purposes to achieve a competitive advantage for American enterprises and their products on domestic and foreign markets. It represents more than only pure theory or a manual. It is an important method of acting in the area of the whole enterprise management, the process of constant improvement of all aspects important for individual stakeholders, employees, shareholders, customers and society.

The practice is the evidence of the fact that currently there are methods enabling the assessment of the achieved status of the Business Excellence. The question is which of those methods is the right one? Jankalova, (2012).

In 1992, European Foundation for Quality Management (EFQM) founded a quality award based on self assessment as well. The basic notion behind was that results were driven by the processes and the system as a whole. Here, the system refers to the organization's strategy, leadership, people, efficient use of resources, clear definition of its processes and results.

The starting framework for determination of the achieved Business Excellence status is formed by models with fixed scale of criteria, on the grounds of which it is not only possible to objectively evaluate individual enterprises, but especially mutually compare them. Models of Business Excellence are used for assessing the achieved status of Business Excellence, in Japan in form of Deming Prize model, in USA in form of Malcolm Baldrige model, in Europe in form of EFQM model. All said models are based on basic TQM pillars - people, processes and results. Jankal, (2014).

The world does not stand still. It is changing ever more rapidly. The interdependencies between organizations, communities, countries and economies are strengthening and increasing in complexity.

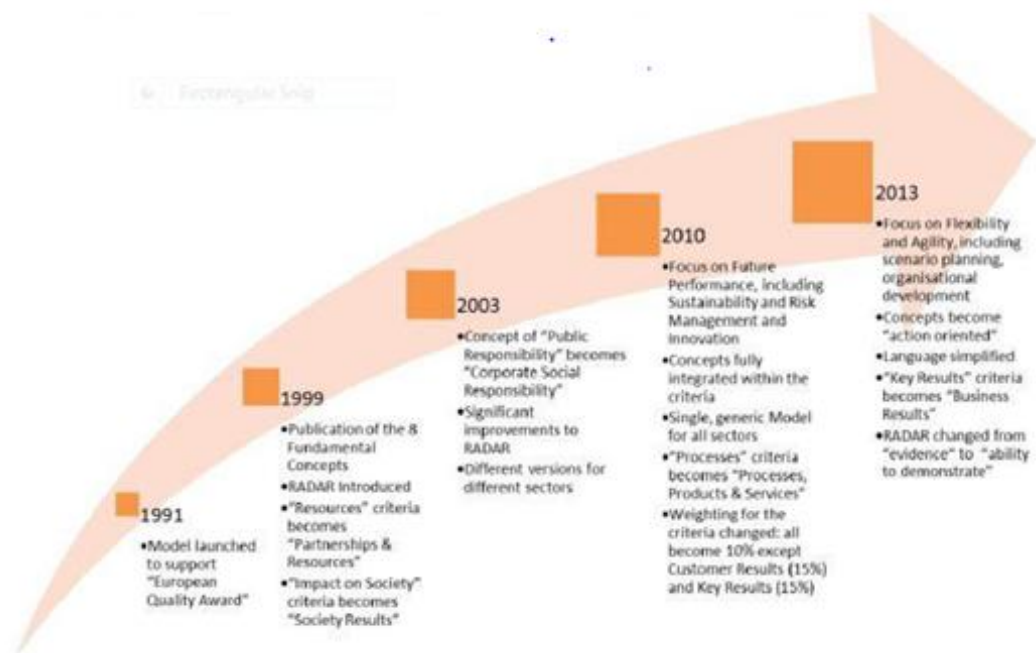
To remain competitive in this environment, any organization needs to continually innovate and improve. Now, more than ever before, an organization needs to understand, balance and effectively manage the needs and expectations of their stakeholders. The EFQM Excellence Model is a framework to understand and manage this complexity. The Model is pragmatic and practical, developed by leading organizations, to stimulate continuous improvement. Rompuy, (2012).

## **2- Theme two:**

### **2-a evolution of EFQM Excellence Model:**

EFQM reviews the EFQM Excellence model every three years to ensure it continues to reflect reality and relevance to the current business environment. The latest "EFQM 2013" version was released in October 2012. The main drivers for changing the Excellence model in 2012 were the need for organizations to be more flexible to compete and succeed within the global economic environment. Over the years model has evolved and has kept pace with changes in business environment. Figure 1 below provides key changes made over the years and how the EFQM Excellence model has evolved. Thawani, (2013).

Figure 4: The evolution of EFQM Excellence Model:



Source: Sunil Thawani, the EFQM 2013 Model Changes Implications for Organizations, (2013).

## 2-b Excellence Model overview:

The EFQM Excellence Model 2013 is made up of 3 parts

The Fundamental Concepts of Excellence there are 8 concepts of excellence, which underpin the Model and are the "red threads" that run through the 9 Box Model. These are used to provide a holistic overview.

The 9 Box Model: This is the most recognized part of the EFQM Model. There are 32 criterion parts grouped under 9 criteria, each represented as one of the 9 boxes. These are used to understand the details within the organization. The Radar: this is used as a tool to assess and score during the assessment process. It is based on a cycle of continuous learning and improvement. (EFQM Model Version 2013).

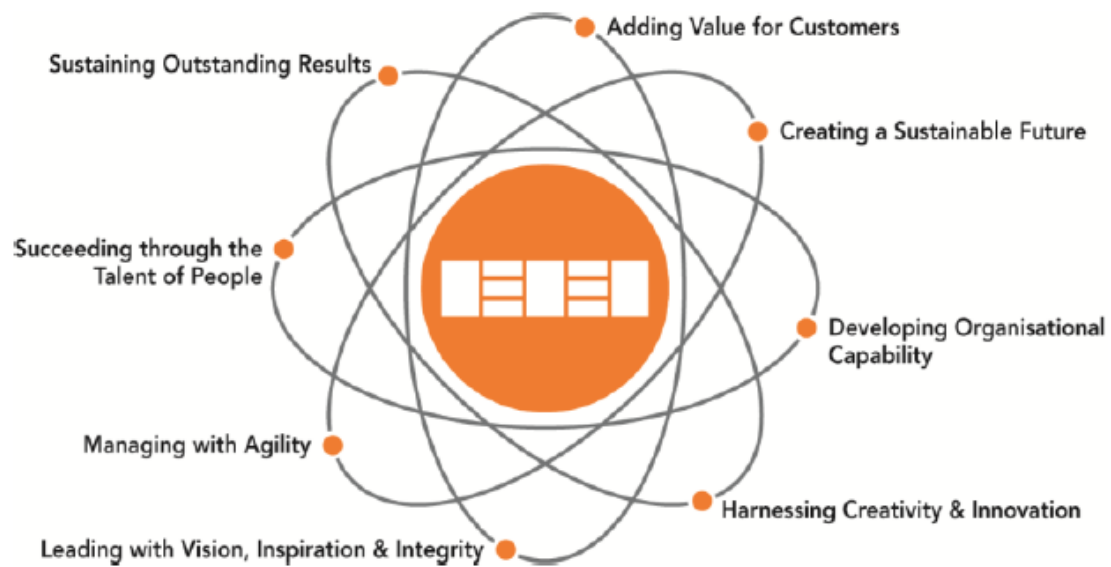
## 2-c The Fundamental Concepts:

The Fundamental Concepts of Excellence outline the foundation for achieving sustainable excellence in any organization.

According to matt fisher, 2012, Some changes was happen to the fundamental concepts in version 2013, the core team of EFQM identify some title which were confusing or not well understood in the last version e.g. "achieving balance results" they proposed changes to make these clearer and more "action oriented" e.g. "creating a sustainable future" rather than " taking responsibility for a sustainable future".

The concepts of partners and process have been expanded to cover wider aspects of developing organizational capabilities and ensuring agility& flexibility.

*Figure 5: The Fundamental Concepts*

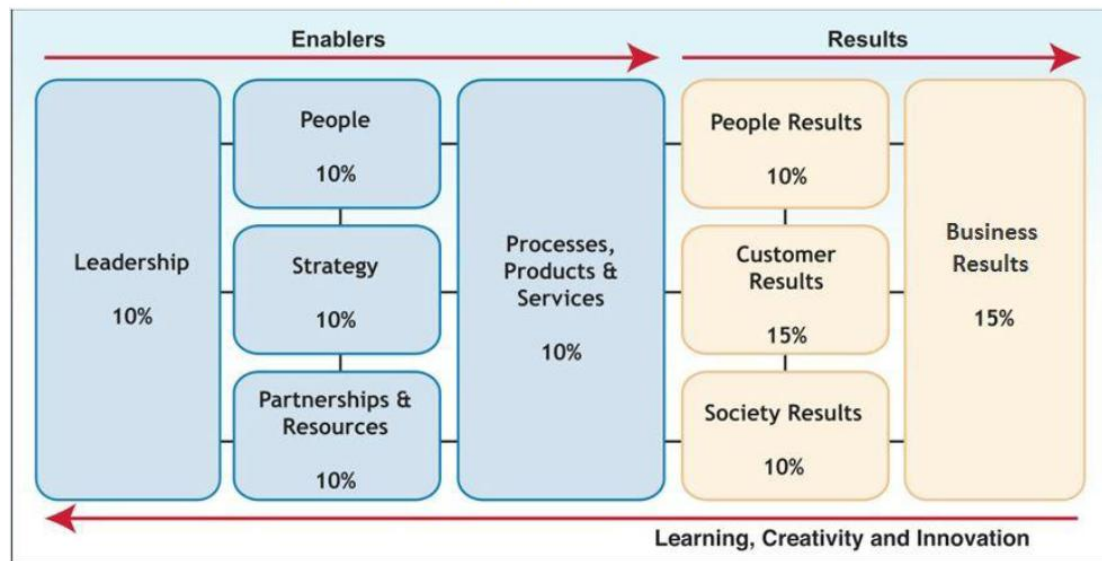


Source: EFQM excellence model version 2013.



## 2-e the Criterion:

*Figure 6: the model criterion*



*Source: Sunil Thawani, the EFQM Model version 2013*

## 2-f Enabler Criterion:

The content of the 'Enabler' criteria requires organizations must develop suitable 'Approaches' to achieve desired results. For example:

- Use approaches to understand, anticipate and respond to the different needs and expectations of their key stakeholders (sub criteria 1c)
- Use a structured approach for generating and prioritizing creative ideas (sub criteria 1e)
- Use mechanisms to identify changes in their external environment (sub criteria 2a)

This reinforces Prof. Ishikawa's concept of 'Cause and Effect' since 'Approaches' cause 'Results'. Organizations must pay attention to the development of sound and aligned approaches like policies, procedures, and charters and deploy these through appropriate methods and channels. EFQM 2013 now provides enhanced focus on the use of relevant measures. To ensure relevance, the Radar assessment and scoring methodology limits the maximum 'Results' score so that it is capped to the level achieved under the 'Scope & Relevance' attribute.

This is to ensure organizations measure the Right things rather than measuring anything/ everything for the sake of measurement.

Measurement of results needs to be a judicious mix of qualitative (perception of stakeholders) and quantitative (key performance indicators) and should be focused on stakeholder needs. To ensure that relevant measurements are used to drive future performance, organizations need to regularly review what they are measuring and why, and make necessary adjustments. *Thawani, 2013* think that, EFQM 2013 version requires measurements (KPIs/SLAs) for processes and information and knowledge.

It is appropriate here to clearly understand the concept around Process measurements as explained by Dr. Joseph Juran, Quality guru. There are 5 enablers, pictured on the left-hand side of the Model. These are the things an organization needs to do to develop and implement their strategy. (EFQM, 2013). Below we are illustrating some defections for these criteria.

#### 2-f-i Leadership:

*Definition:* Excellent organizations have leaders who shape the future and make it happen, acting as role models for its values and ethics and inspiring trust at all times. They are flexible, enabling the organization to anticipate and react in a timely manner to ensure the on-going success of the organization.

#### 2-F-ii Strategy:

*Definition:* Excellent organizations implement their mission and vision by developing and deploying a stakeholder focused strategy. Policies, plans, objectives and processes are developed and deployed to deliver the strategy.

#### 2-F-iii People:

*Definition:* Excellent organizations value their people and create a culture that allows the mutually beneficial achievement of organizational and personal goals. They develop the capabilities of their people and promote fairness and equality. They care for, communicate, reward and recognize, in a way that motivates people, builds commitment and enables them to use their skills and knowledge for the benefit of the organization.

#### 2-F-iv Partnerships & Resources:

*Definition:* Excellent organizations plan and manage external partnerships, suppliers and internal resources in order to support strategy and policies and the effective operation of processes.

#### 2-f-v Processes Products & Services:

*Definition:* Excellent organizations design, manage and improve processes to generate increasing value for customers and other stakeholders.

## 2-h Results Criterion:

There are 4 result areas, shown on the right-hand side of the Model. These are the results an organization achieves, in line with their strategic goals, (EFQM, 2013). Some changes were happen in the new version, for example in criterion 9 the title (key results) making confusion because the word key is using to all other results (key people results, key society results, and key customer results) so it changed to business results to demonstrate business stakeholder, e.g. owners, shareholders, head office and government, Changes are restricted to the guidance points, aligned to the new concepts and using simplified languages, Matt fisher, 2012,

### 2-h-i Customer Results:

*Definition:* Excellent organizations achieve and sustain outstanding results that meet or exceed the needs and expectations of their customers.

### 2-h-ii People Results:

*Definition:* Excellent organizations achieve and sustain outstanding results that meet or exceed the needs and expectations of their people.

### 2-h-iii Society Results:

*Definition:* Excellent organizations achieve and sustain outstanding results that meet or exceed the needs and expectations of relevant stakeholders within society.

### 2-h-iv Business Results:

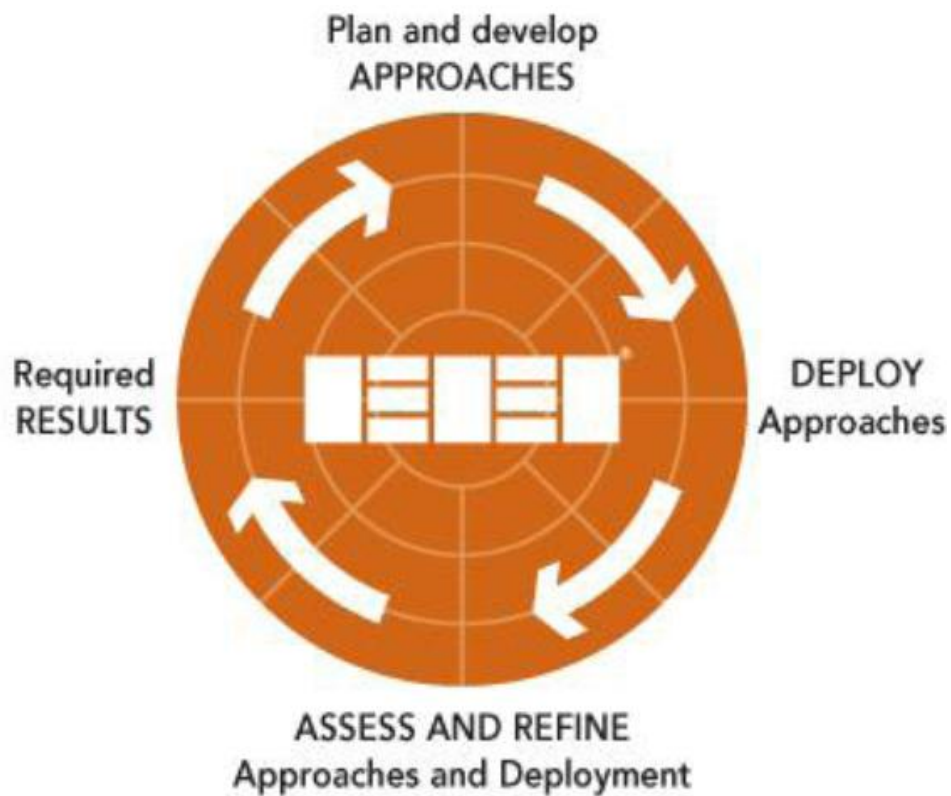
*Definition:* Excellent organizations achieve and sustain outstanding results that meet or exceed the needs and expectations of their business stakeholders.

## **3- Theme three: The Radar & acceptability of the model.**

### 3-a The Radar:

The radar logic is a dynamic assessment framework and powerful management tool that provides a structured approach to questioning the performance of an organization. But what changed in the new version, According to matt fisher, 2012; the bullet points have been reduced to a single guidance point for each attribute of the Radar, and the scoring scale had been simplified to be consistent in each attribute.

*Figure 7: The Radar*



Source: EFQM excellence model version 2013.

3-b Acceptability of the EFQM excellence model:

The European Foundation for Quality Management reports that more than thirty thousand European organizations employ the EFQM Model for organizational quality and performance. EFQM model, (2013).

## **Chapter three:**

1. Theme one: SHG, overview
2. Theme two: Results & discussions

## Chapter three

### **Theme one: SHG, overview:**

SHG. Industrial complex one of Gaid Group companies. Stated south Khartoum in area about five km square at the east shore of the White Nile. This complex established at first time in 1964, the most of the machines at that time is from Germany its produce defense product like small calibers of ammunitions and spare parts for civilian industries.

The main customers are the Sudanese army and civilian factories. The employees of SHG are nearly to six hundred of engineers and technicians.

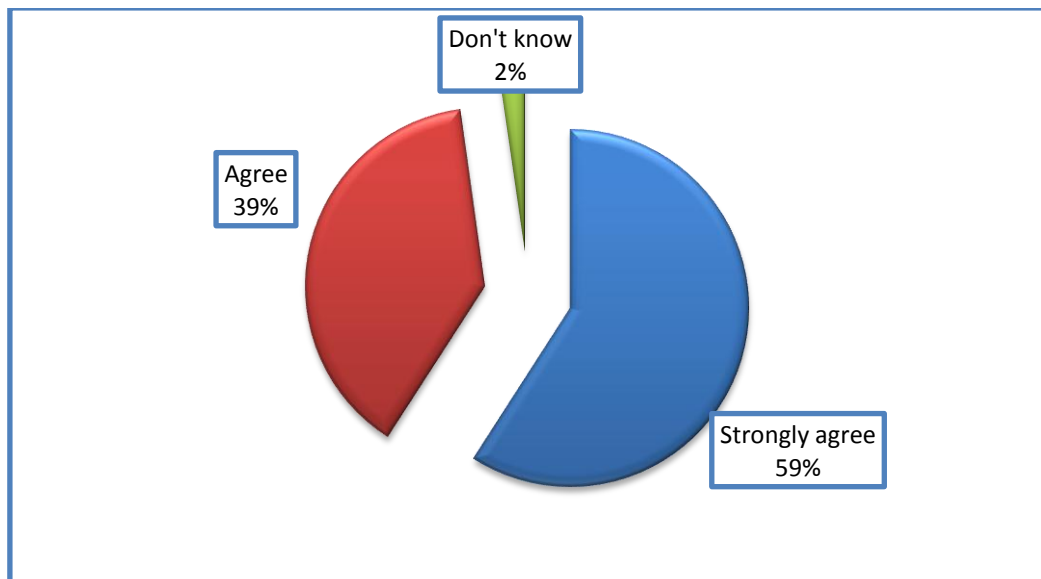
SHG. Adopted the EFQM excellence model since 2007. So it's an award winner for two last cycle of Giad excellence award.

## **1. Results & discussions:**

The study demonstrates that 90.5% of respondent employees agreed that there is an impact of excellence model implementation on systems and procedures, questionnaire results shows 98% of employees think that leaders of SHG define the organization's management system (figure 8) and 88.9% agree that A framework of key processes was used to implement the strategy whilst 9.7% don't know that A framework of key processes was used to implement the strategy (figure 9) and this reflect the weakness of strategy execution and communication. Results show that 80.7% of respondent employees think that Organizational structure aligned with strategy While 18.3% don't know the alignment of culture with strategy, which confirm the weaknesses of strategy execution and communication? (Fig 10). The research shows that 90.3 % of the employees drive the improvement of the organization's management system while 5.4% don't agree to drive the management system of the SHG. Complex (figure 11) it was found that 95.7% of the respondents ensure that a clear direction and goals were sited and communicated in SHG.(figure 12) Study illustrate 97% of employees thinks organization Strategy support and develop policies of management system and procedures, since 3% only don't think so.(figure 13). 95.7% of the respondents employees think that Products and services in SHG. Were developed to create optimum value for customers, this indicate that the customer focus concept is very clear in SHG. (Figure 14). As consequence according to all discussions and results presented above which related to "The impact of excellence model implementation on systems and procedures"? Ensure that the hypothesis (H1) based on this factor is accepted.

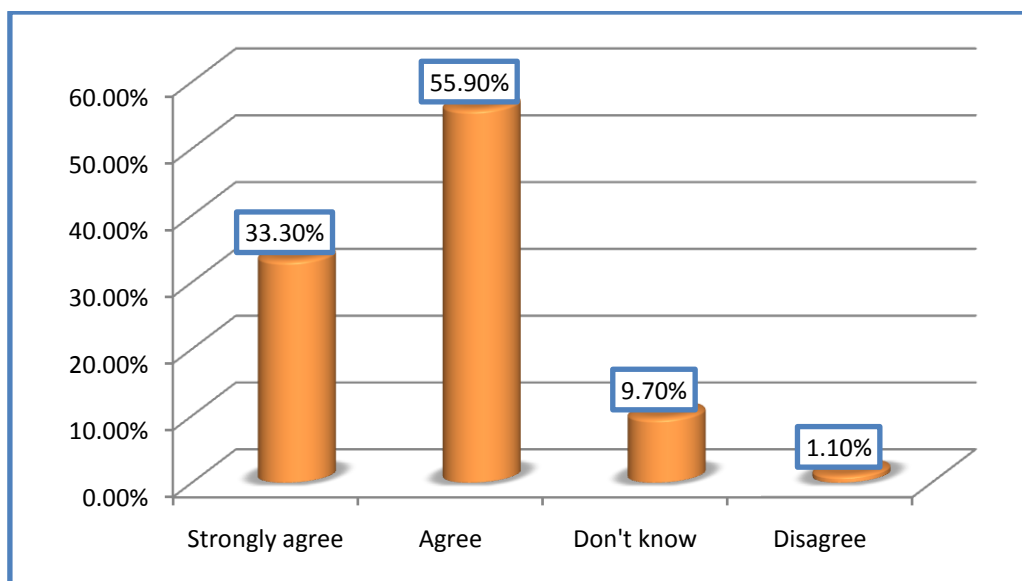
## 2. Graphs of frequencies and percents.

**Figure (8): Our leaders define the organization's management system**



Source: student spss analysis

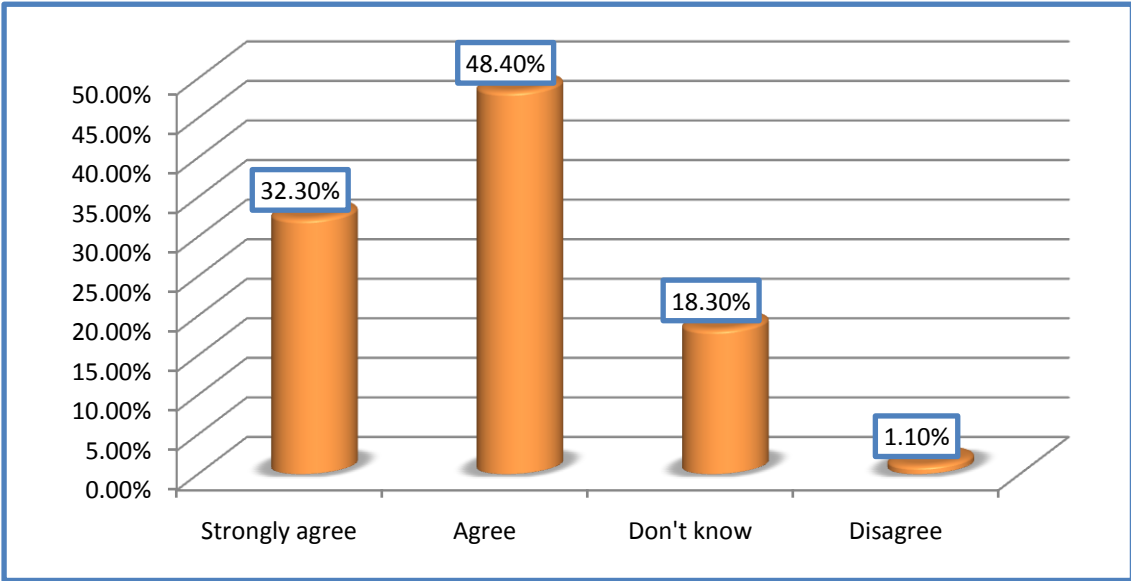
**Figure (9): A framework of key processes was used to implement our strategy:**



Source: student spss analysis

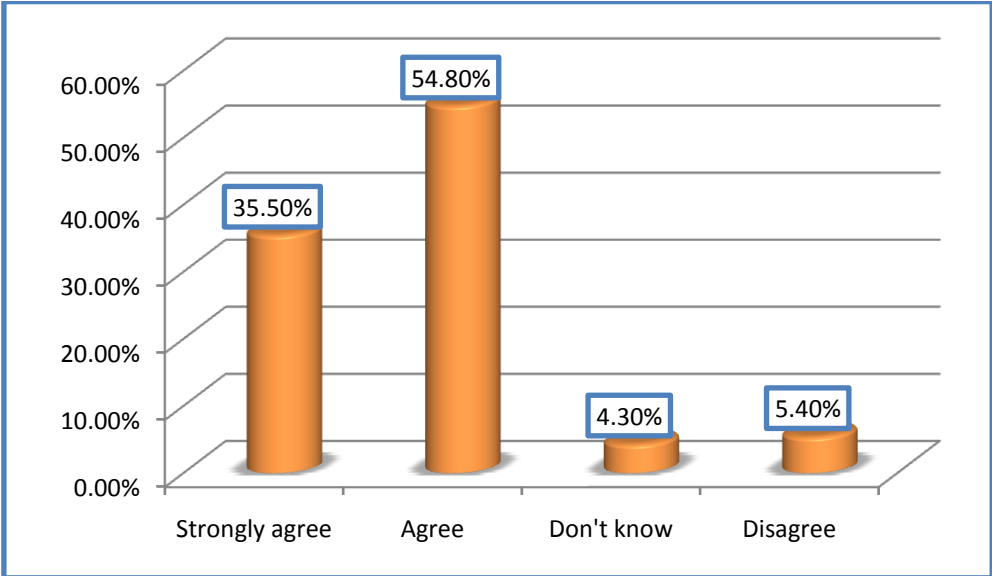


**Figure (10): Organizational structure aligned with our strategy**



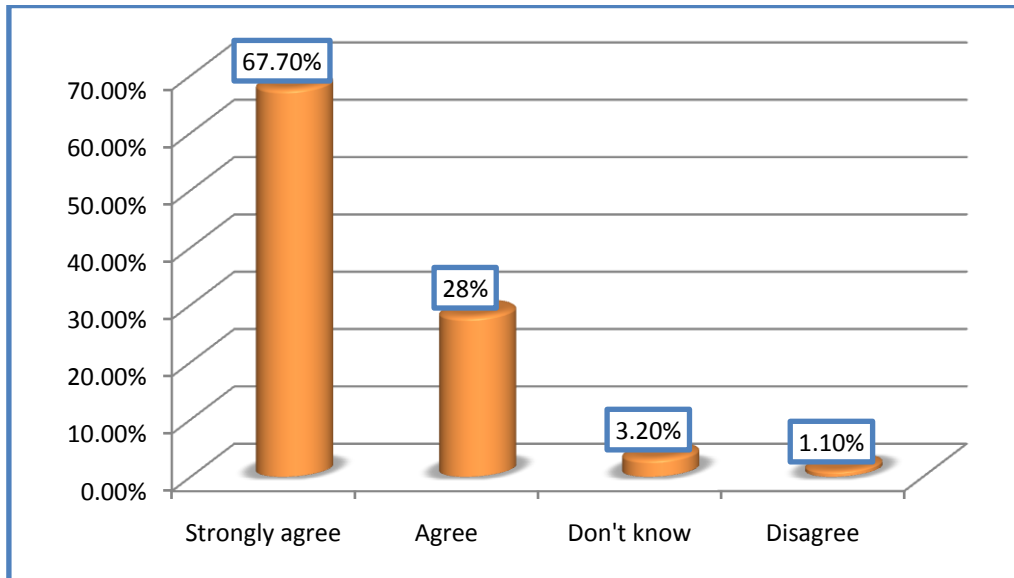
Source: student spss analysis

**Figure (11): In our organization we drive the improvement of the organization's management system**



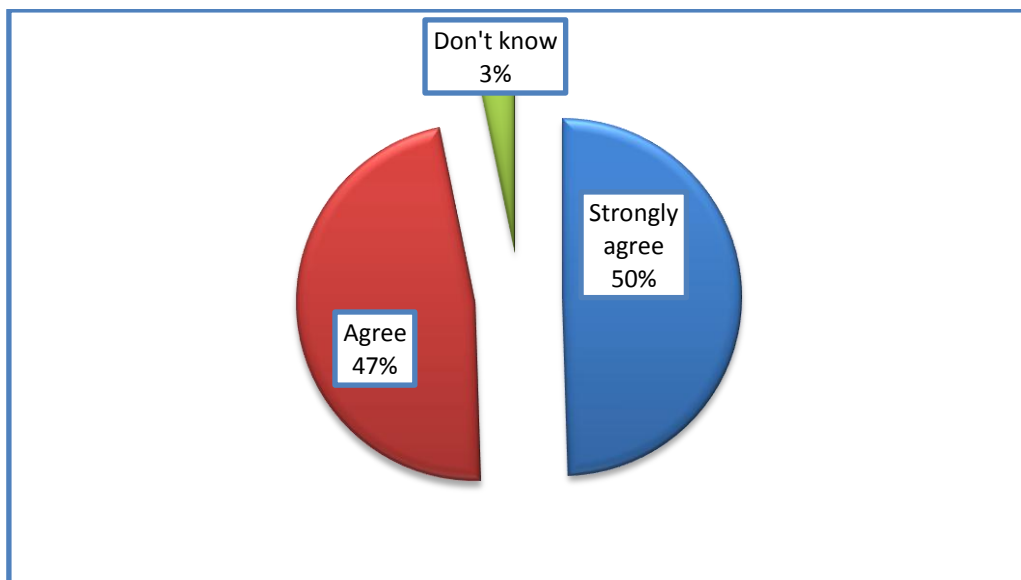
Source: student spss analysis

**Figure (12): A clear direction and goals were sited and communicated in our firm**



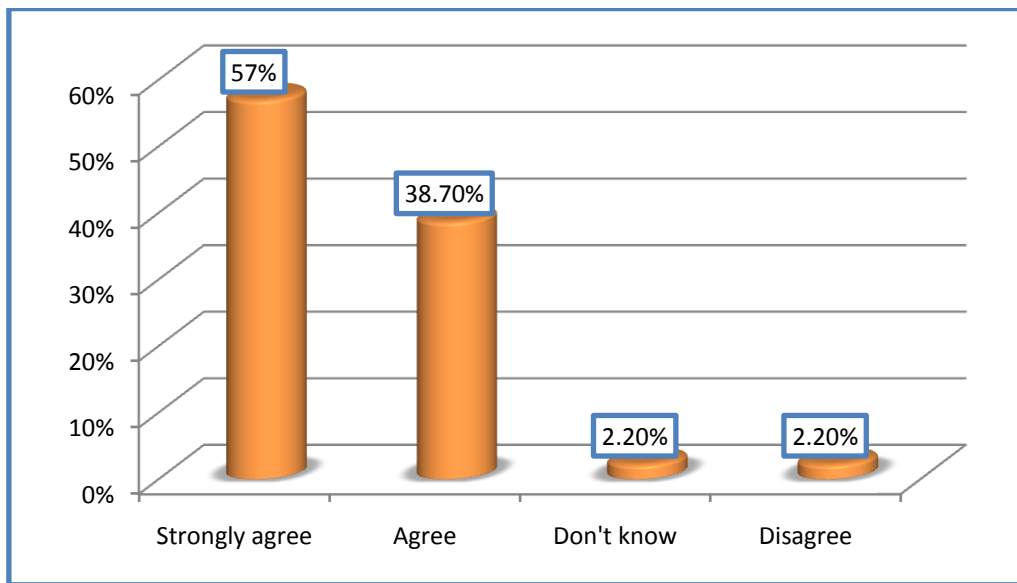
Source: student spss analysis

**Figure (13): Strategy of our organization support and develop policies of management system and procedures:**



Source: student spss analysis

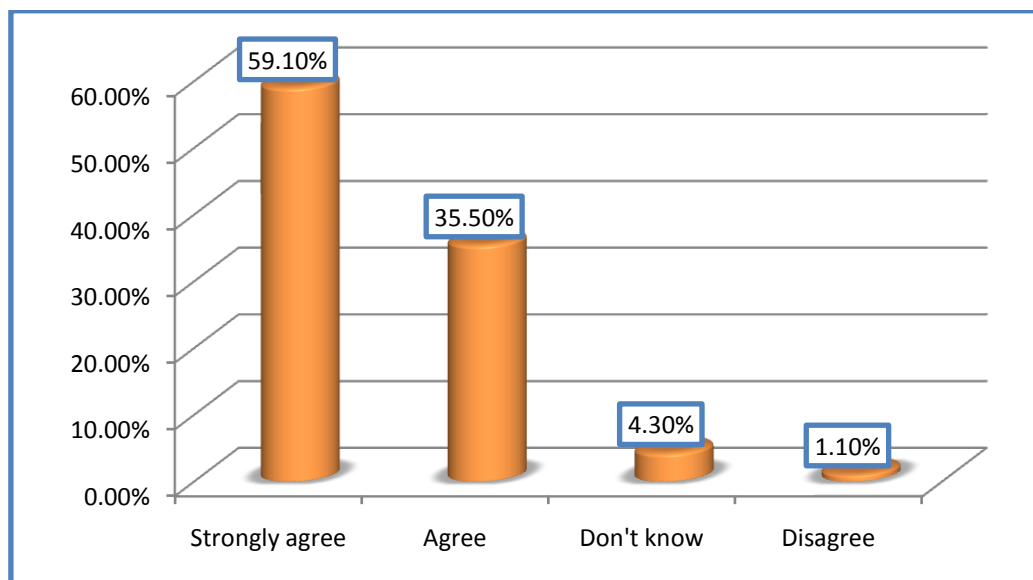
**Figure (14): Products and services were developed to create optimum value for customers**



*Source: student spss analysis*

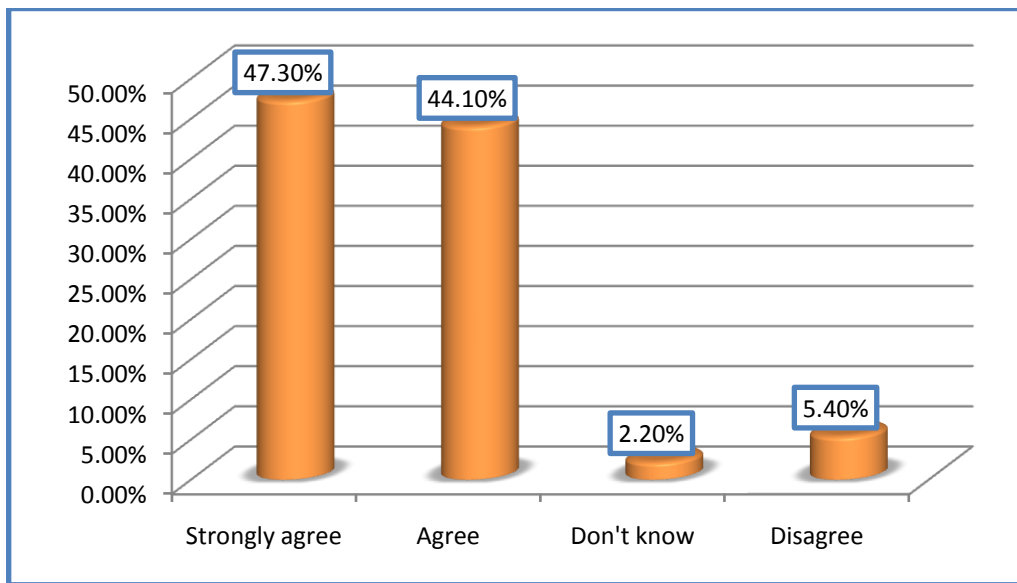
Statistical Results shows that 93.6% of employees agree that there is impact of excellence model implementation on organizational culture. Questionnaire results shows 94.6% of employees think that leaders reinforce a culture of excellence with the organization's people since 4.3% of the respondent employees don't know this role for leaders,(figure 15) the research illustrate that 91.4% of employees think that Culture of involvement and empowerment are created among the employee,(figure 16) the results show that 99% of employees ensure that Culture of ownership is their goal(figure 17) and this indicates that the employee satisfaction and loyalty is high. Study demonstrate that 97.9% of responded employees Possessing a culture of improvement and accountability, (figure18). 92.5% of the responded employees are promoting a culture which supports the generation of new ideas while 3.2% of employee don't promoting a culture which supports the generation of new ideas,(figure19), and this indicate there is a weakness in the motivation approaches. results shows that 95.7 %( figure20), and 83.9 %( figure21), of the employees ensure that There is a sound approach to develop a culture that continually seeks to improve the effectiveness of collaboration and teamwork among the employees. And ensuring that Using technology to support culture of creativity and innovation, respectively. Some evidences 9.7% of the respondents demonstrated that using technology to support culture of creativity and innovation is not sure or not clear.

**Figure (15): Our leaders reinforce a culture of excellence with the organization's people**



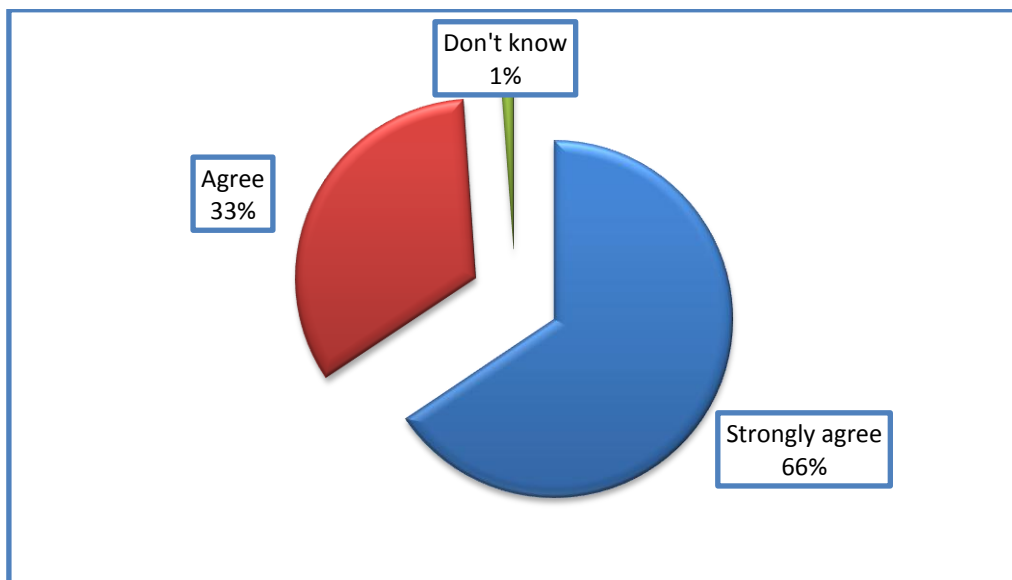
Source: student spss analysis

**Figure (16): Culture of involvement and empowerment are created among the employee**



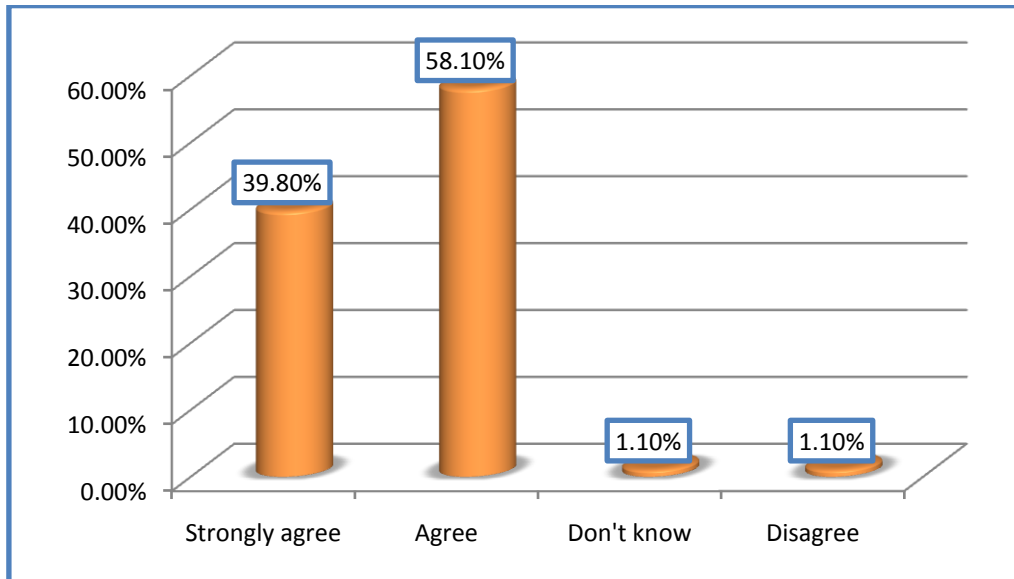
Source: student spss analysis

**Figure (17): Culture of ownership is our goal**



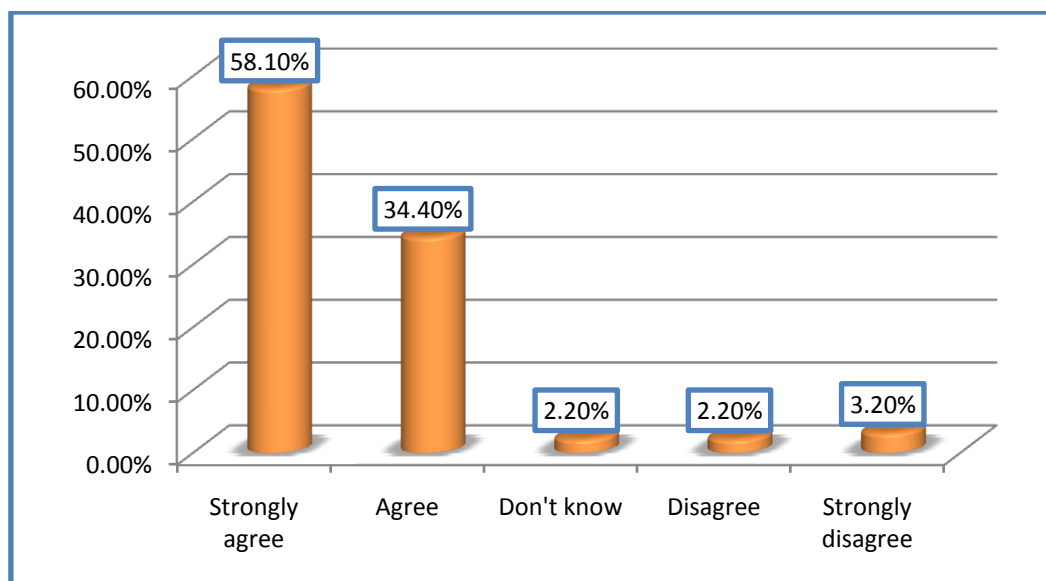
Source: student spss analysis

**Figure (18): Possessing a culture of improvement and accountability**



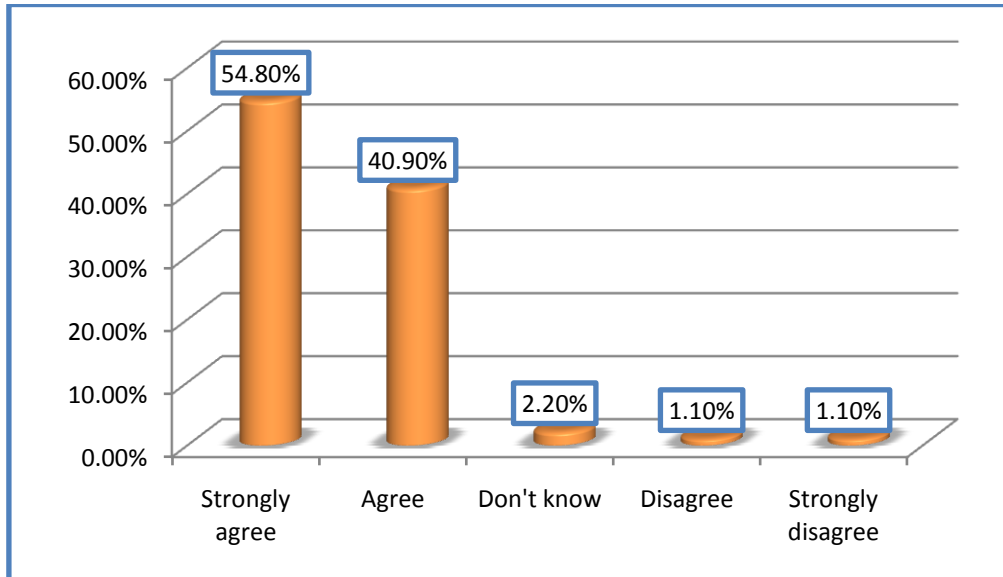
Source: student spss analysis

**Figure (19): We are promoting a culture which supports the generation of new ideas**



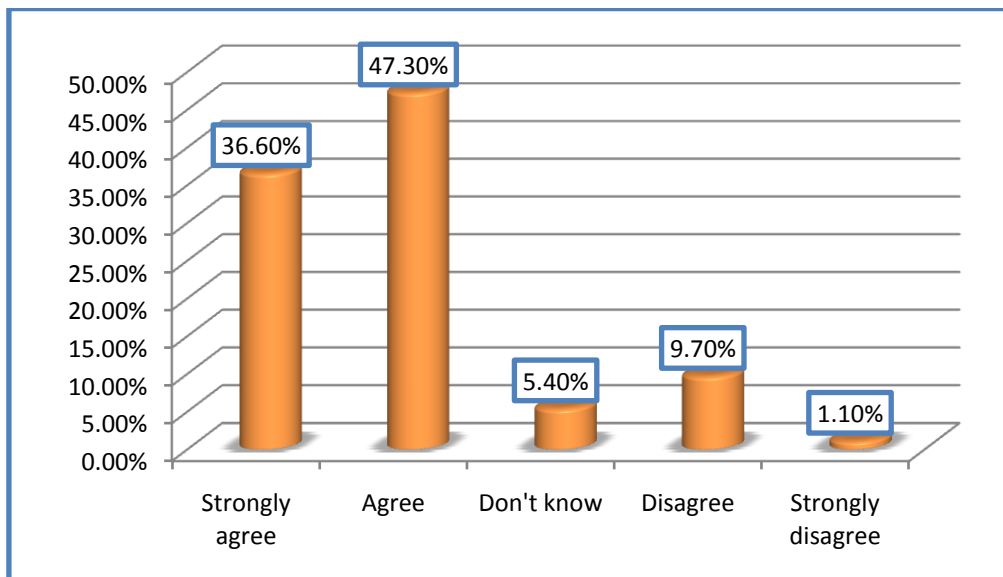
Source: student spss analysis

**Figure (20): There is a sound approach to develop a culture that continually seeks to improve the effectiveness of collaboration and teamwork:**



Source: student spss analysis

**Figure (21): Using technology to support culture of creativity and innovation**

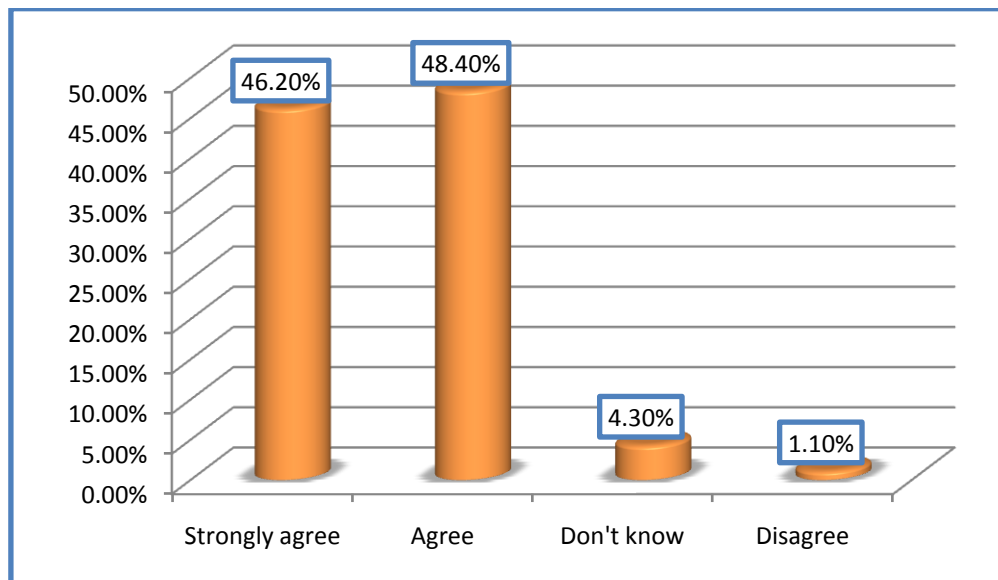


Source: student spss analysis

Avazpour, et-al studies, (2013): stated that There is a positive and significant relation between culture and excellence performance based on EFQM model which agree with our study but Salih Yesil,& Ahmet Kayab, 2013, results were insignificant, which mean that organizational cultural dimensions have no significant effect on performance don't agree with our results.

Results shows 92.5% agree that Excellence model implementation will improve the design of organizations. The study discover that 94.6 %( figure22), and 88.2 %( figure23), and 93.5%(figure 24) and 89.2%(figure 25), of the employees demonstrated that leaders ensure the organization is flexible and manages change effectively and adapted Organizational structure to support the achievement of strategic goals and illustrate that Processes are designed and managed to optimize stakeholder value and Designing the products and services portfolio. in respectively. while the results demonstrate that 4.3%(figure22), 7.5%,(figure23), and 5.4%(figure25) of the employees has lack of awareness in this topics " leaders role of ensuring the organization is flexible and manages change effectively and adapted Organizational structure to support the achievement of strategic goals and illustrate that Processes are designed and managed to optimize stakeholder value and Designing products and services portfolio. This reflects weakness in the internal communication of SHG. Especially among technicians and labors. The research discover that 96.8% and 97.5% of the employees ensure that SHG. Leaders, designing and developing a meaningful mix of process performance indicator and related outcome measures. And effectively manage change through structured project management and focused process improvement,( figure 26&27) respectively.

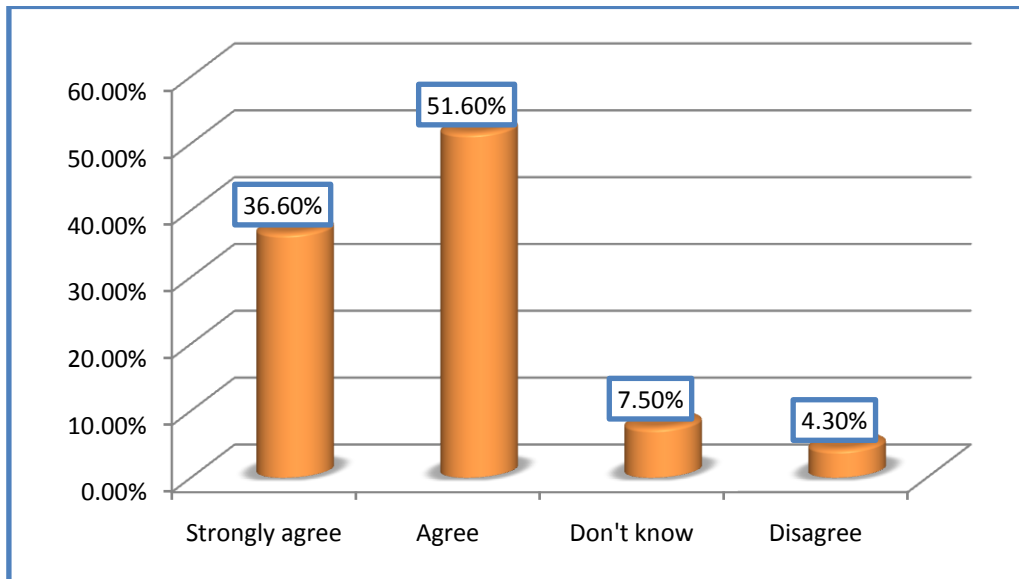
**Figure (22): Our leaders ensure that the organization is flexible and manages change effectively**



Source: student spss analysis

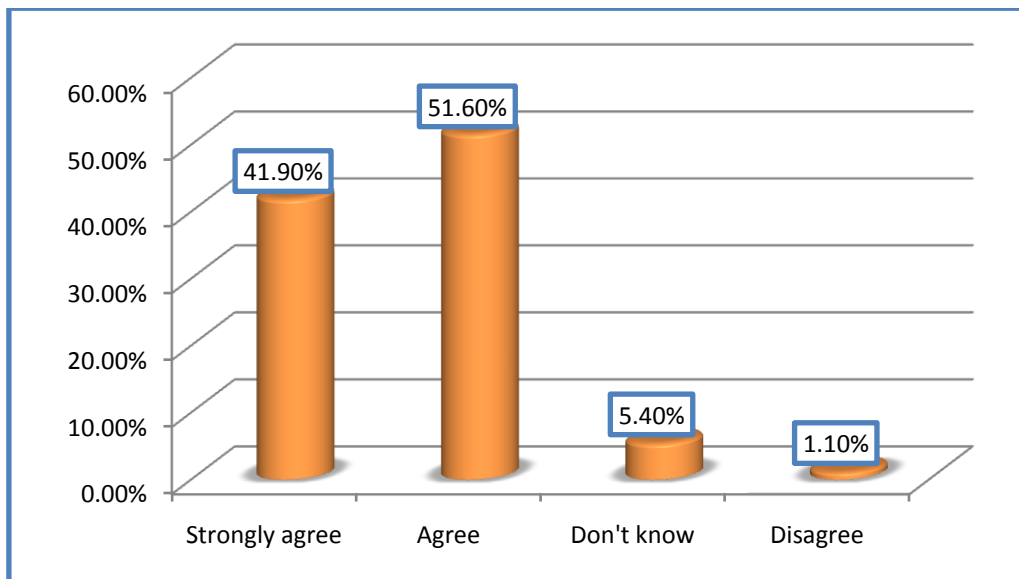


**Figure (23): Our people adapt Organizational structure to support the achievement of strategic goals**



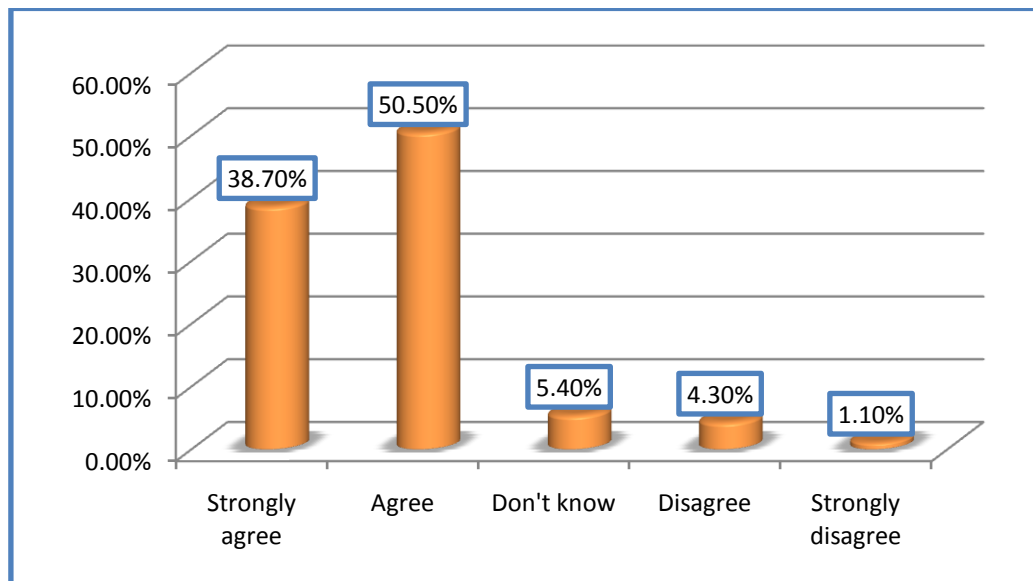
Source: student spss analysis

**Figure (24): Processes are designed and managed to optimize stakeholder value:**



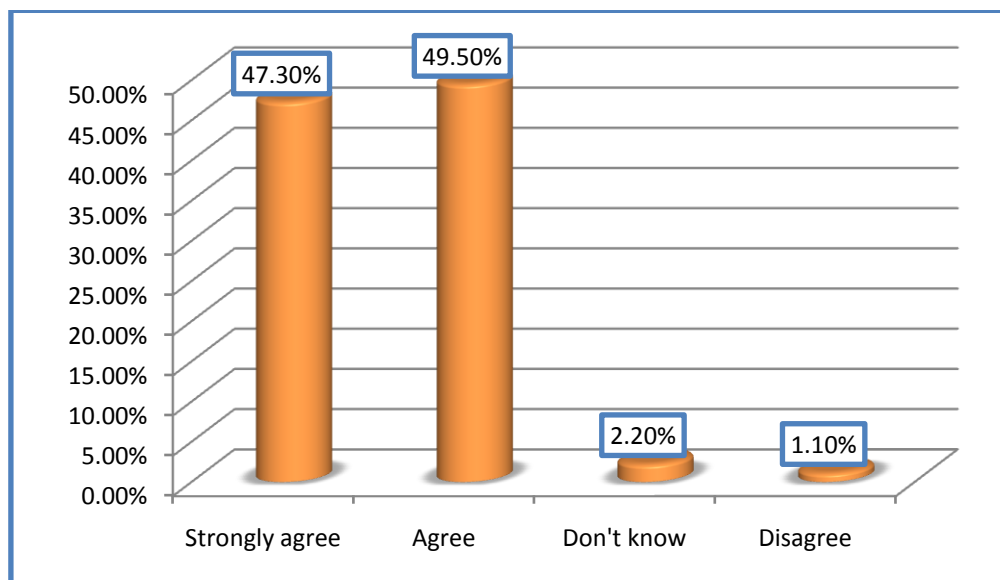
Source: student spss analysis

**Figure (25): Designing our products and services portfolio carefully**



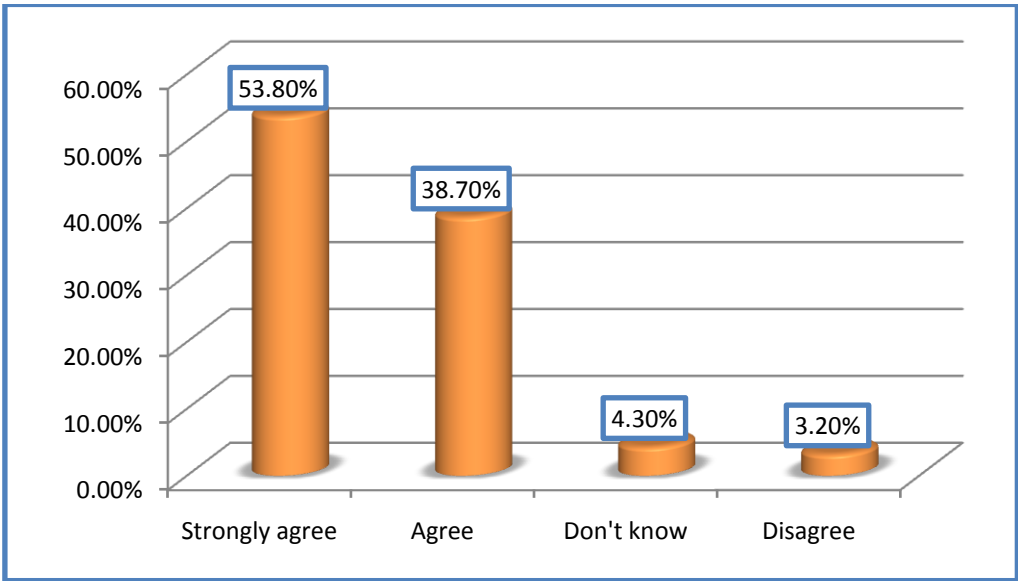
Source: student spss analysis

**Figure (26): We are designing and developing a meaningful mix of process performance indicator and related outcome measures**



Source: student spss analysis

**Figure (27): Our Company effectively manage change through structured project management and focused process improvement**

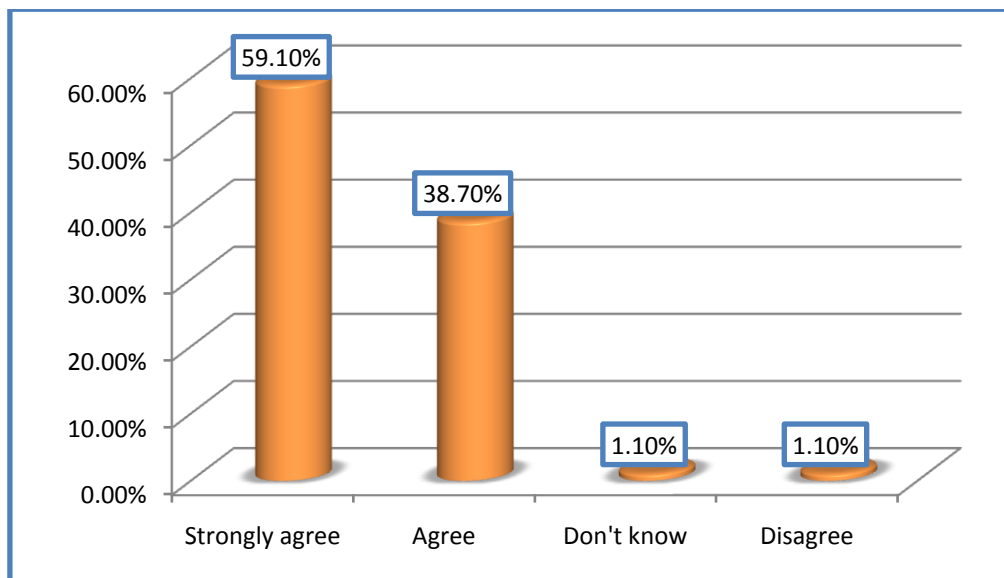


Source: student spss analysis

The results show 91.5% of the respondent's employees were belief that Excellence model implementation enhances the managerial and employees recognition. Questionnaire statistical results demonstrate that 97.8%, 97.9%, 91.9%, 82.8% , and 92.4% of the investigated employees ensures that, leaders develop the mission, vision, values and ethics and act as role models for the employees, and the people communicate effectively throughout the organization and their knowledge and capabilities were developed. Information and knowledge are managed to support effective decision making and to build organization's capability, (figure 28,29,30,31, and 32), respectively.

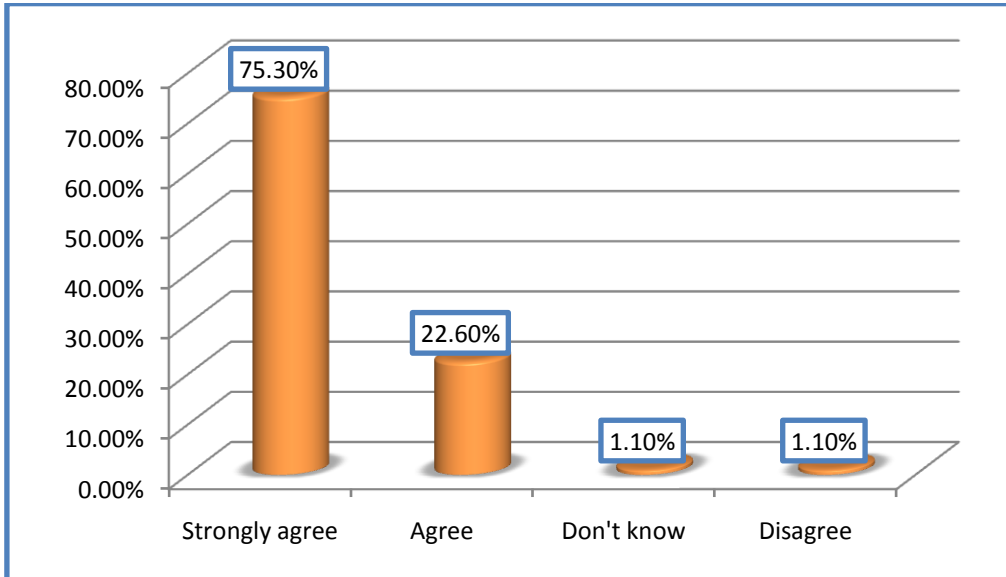
Study discovered that 89.2% (figure 33), and 89.3% (figure 34), of employees think that SHG, staff manages the end to end processes, including processes that extend beyond the boundaries of the complex and agree that the complex Ensuring a healthy work environment, while 7.5% (figure 33) of the respondents employees don't think that the staff of SHG, manages the end to end processes, effectively, this reflect that the supply chain is not clear for the all or its limited and 7.5% (figure 34) of the respondents employees don't agree that the complex Ensuring a healthy work environment this reflect that there is short in health & safety equipments or delay in receiving them.

**Figure (28): Our leaders develop the mission, vision, values and ethics and act as role models**



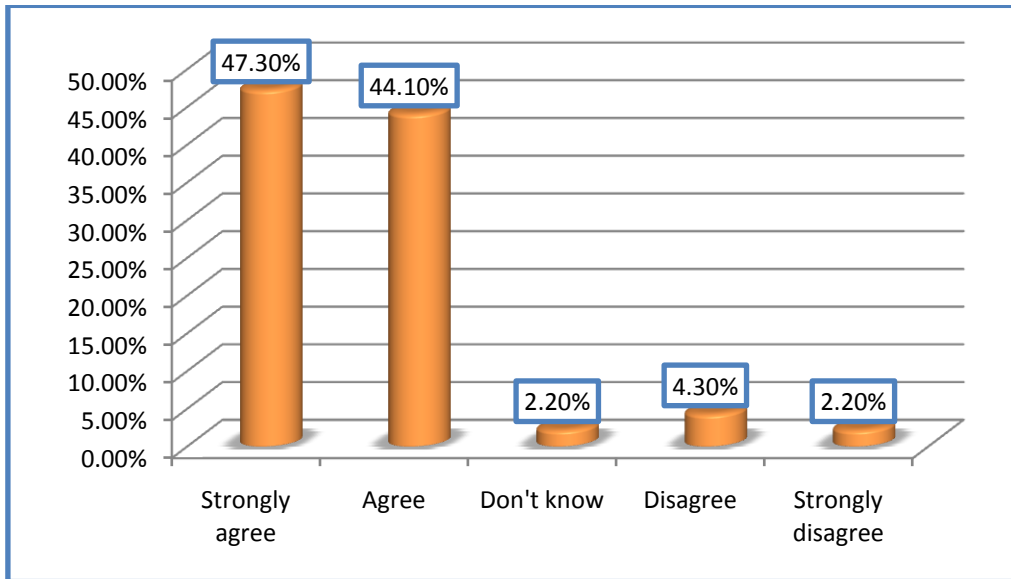
Source: student spss analysis

**Figure (29): People communicate effectively throughout the organization**



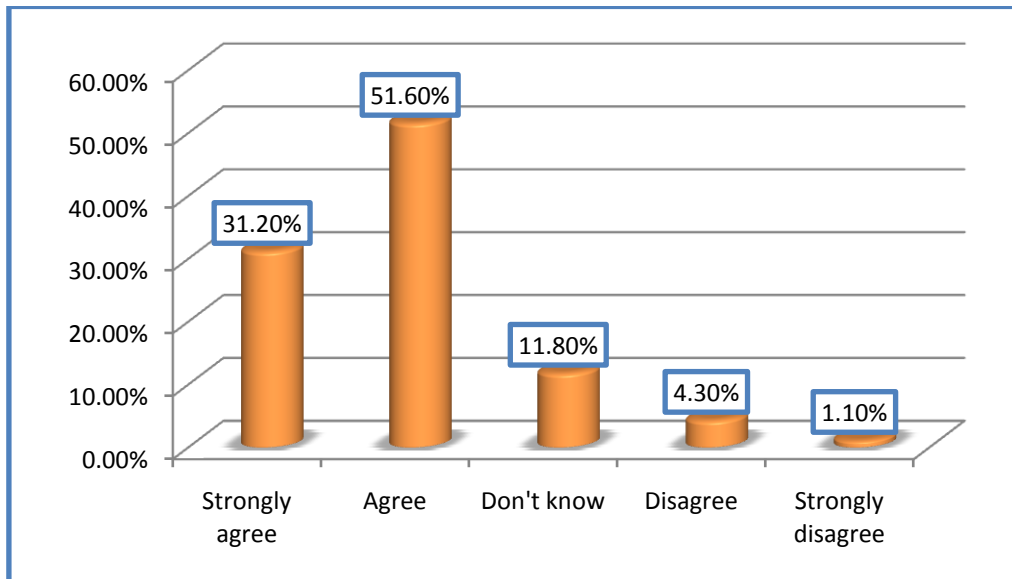
Source: student spss analysis

**Figure (30): People's knowledge and capabilities are developed**



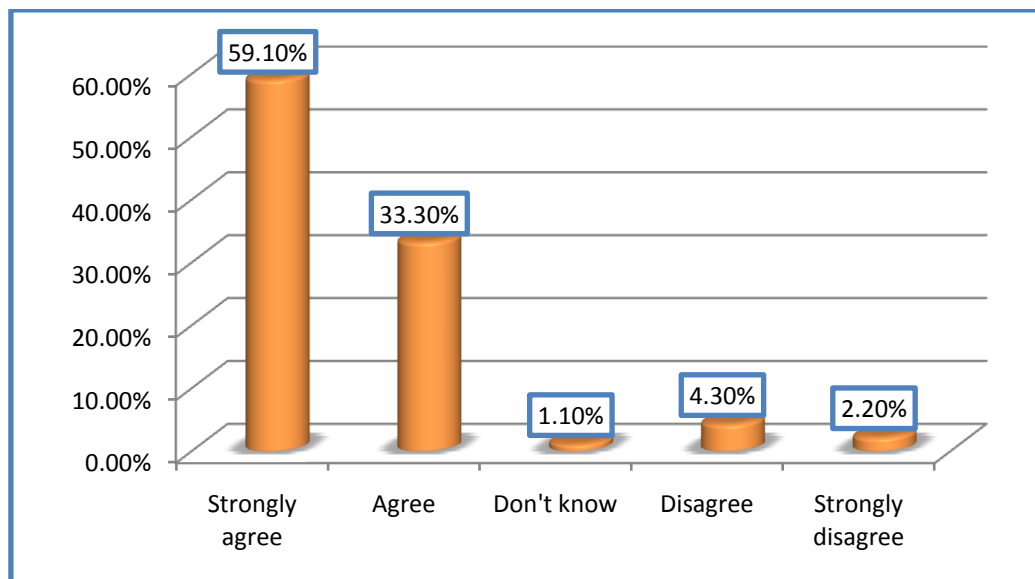
Source: student spss analysis

**Figure (31): Information and knowledge are managed to support effective decision making and to build organization's capability**

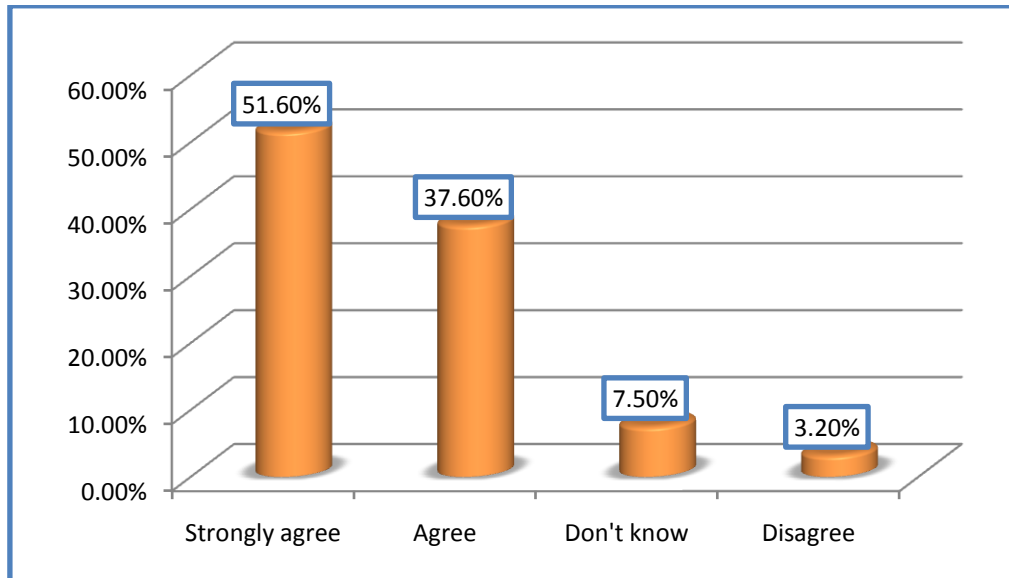


Source: student spss analysis

**Figure (32): Motivating our people to become involve in improvement and innovation**

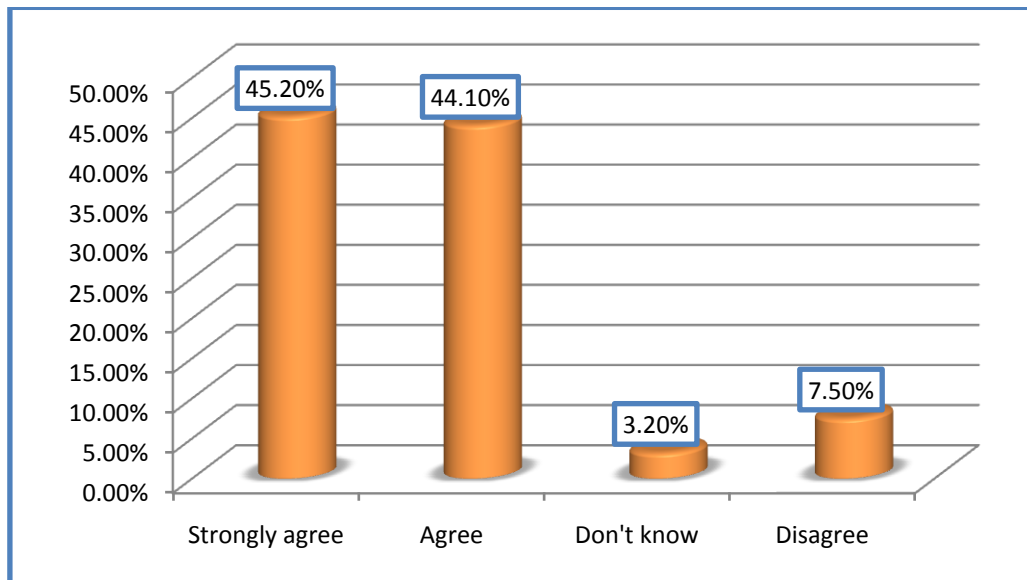


**Figure (33): Our staff manages the end to end processes, including processes that extend beyond the boundaries of the company**



Source: student spss analysis

**Figure (34): Ensuring a healthy work in our company**

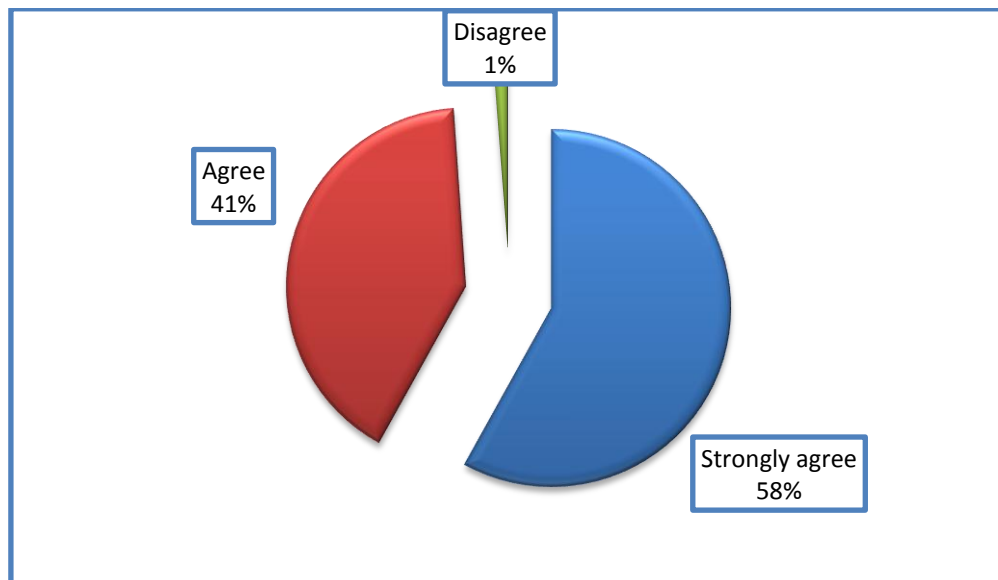


Source: student spss analysis

The results shows that 92% of the respondent's employees think Excellence model implementation reduced the Cost of quality, questionnaire statistical results reveal 99%,95.7%,86.1%,93%,95.7%,92.4% and 81.7% of the respondent's employees illustrated that The complex produces and delivers Products and services to meet or exceed, customer needs and expectations and developing an effective and efficient value chain to ensure consistently deliver on promised value proposition, employees confirm that SHG. Comparing its performance with relevant benchmarks to learn from their strengths, and its Build and maintain a dialogue with customers based on openness and transparency. The results ensure that SHG process owners understand their role and responsibility in developing, maintaining and improving processes to ensure quality, and the leaders designed the financial, control, reporting and review processes to ensure quality and optimize the use of resources, SHG complex HR. defines the skills, competencies and people performance levels required to achieve customer requirement (figures 35, 36, 37,38,39,40 and 41) respectively.

Study discovered that 8.6% (figure34) of the respondents employees not aware by the HR role of defining skills and competences and performance level of the employees, this reflect the lack of awareness and communication.

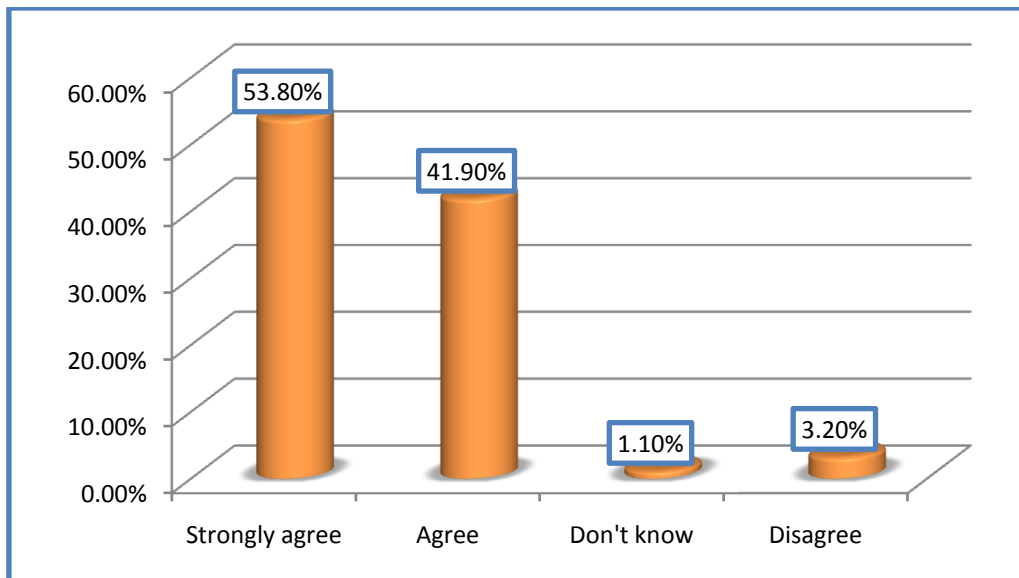
**Figure (35): The company produces and delivers Products and services to meet or exceed, customer needs and expectations**



Source: student spss analysis

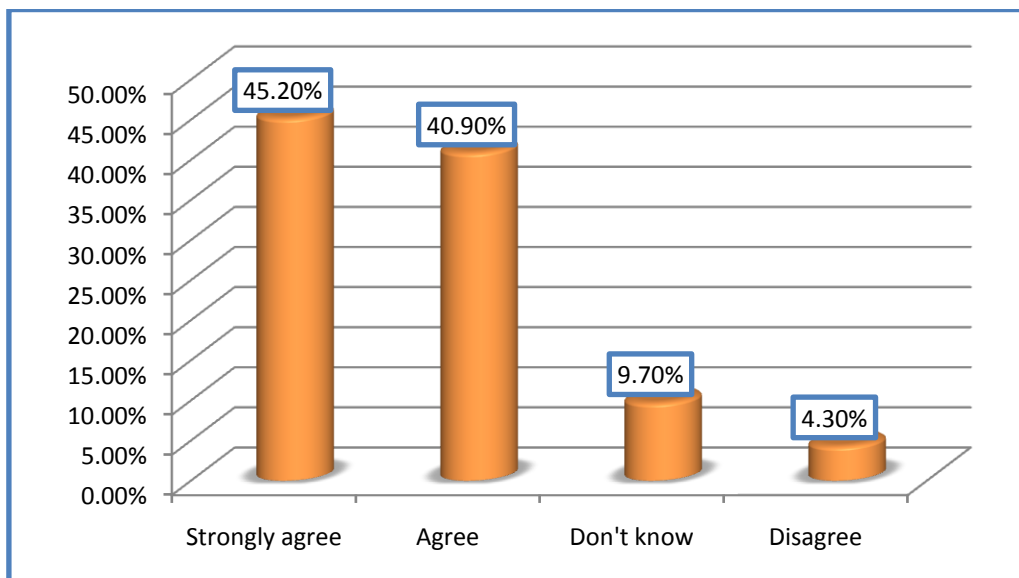
**Figure (36): We are developing an effective and efficient value chain to ensure we can consistently deliver on our promised value proposition**





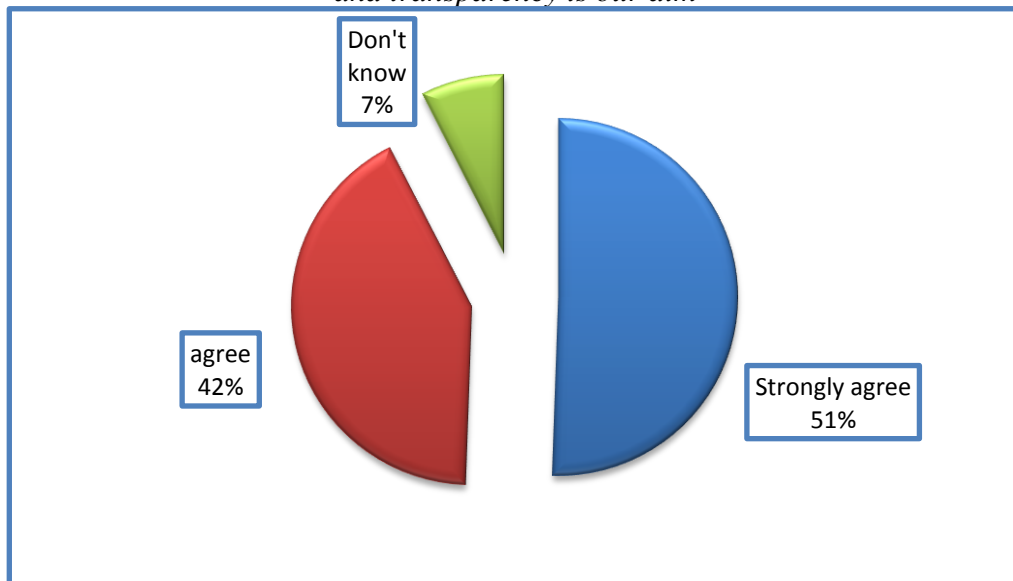
Source: student spss analysis

**Figure (37): Comparing our performance with relevant benchmarks to learn from their strengths**



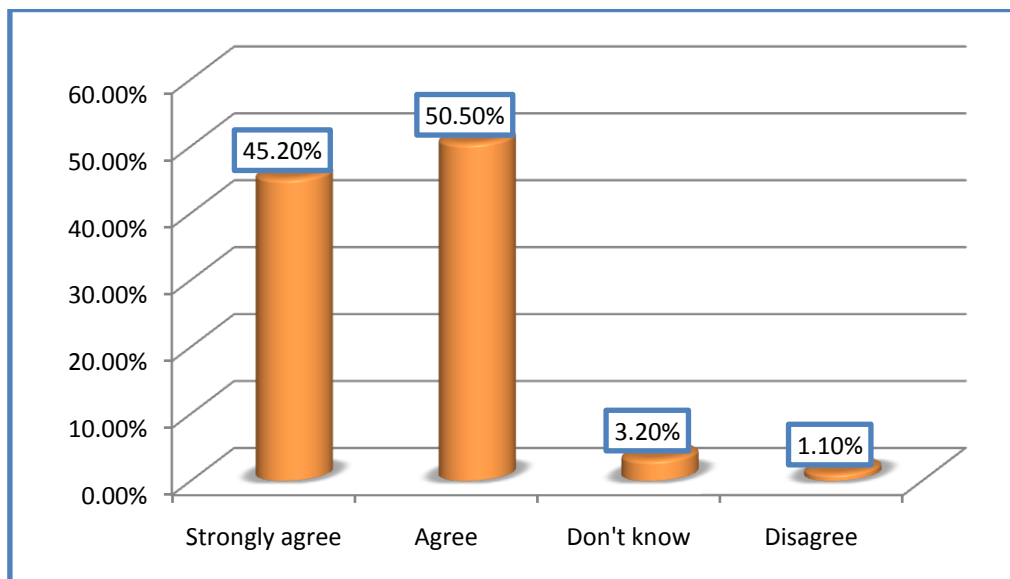
Source: student spss analysis

*Figure (38): Building and maintain a dialogue with customers, based on openness and transparency is our aim*



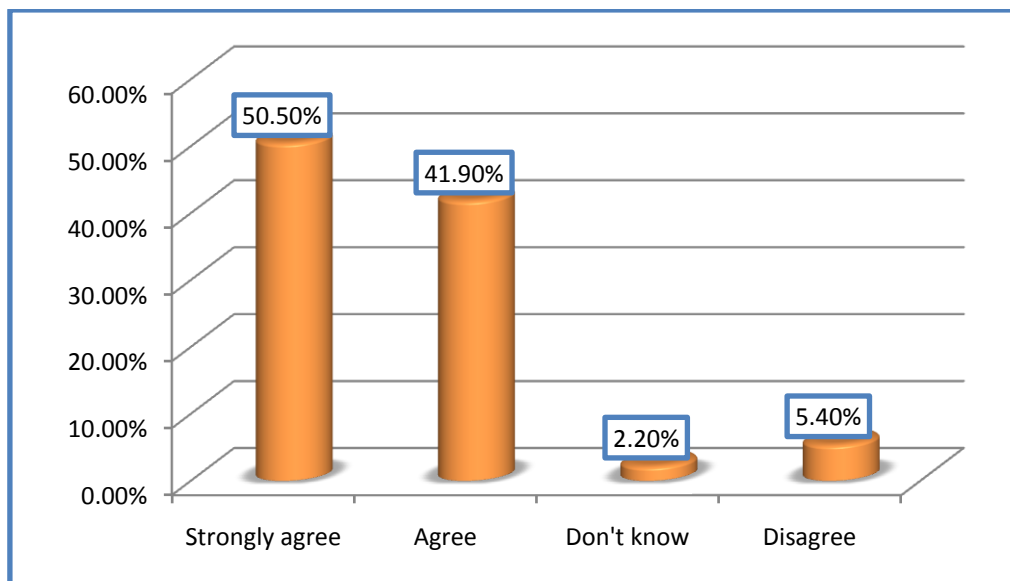
Source: student spss analysis

*Figure (39): Our process owners understand their role and responsibility in developing, maintaining and improving processes to ensure quality*



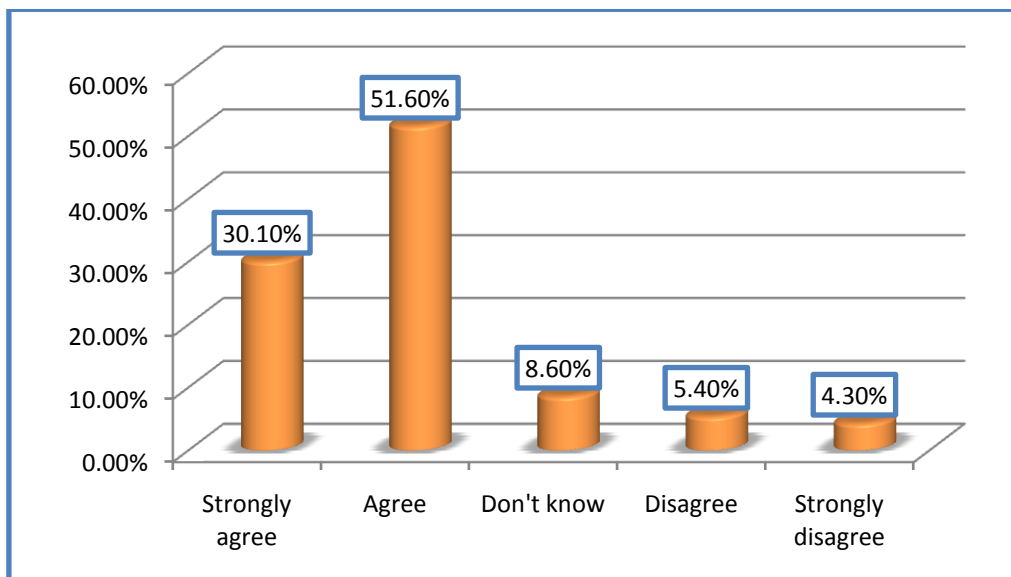
Source: student spss analysis

**Figure (40):** We design the financial, control, reporting and review processes to ensure quality and optimize the use of resources



Source: student spss analysis

**Figure (41):** Our HR. defines the skills, competencies and people performance levels required to achieve customer requirement



Source: student spss analysis

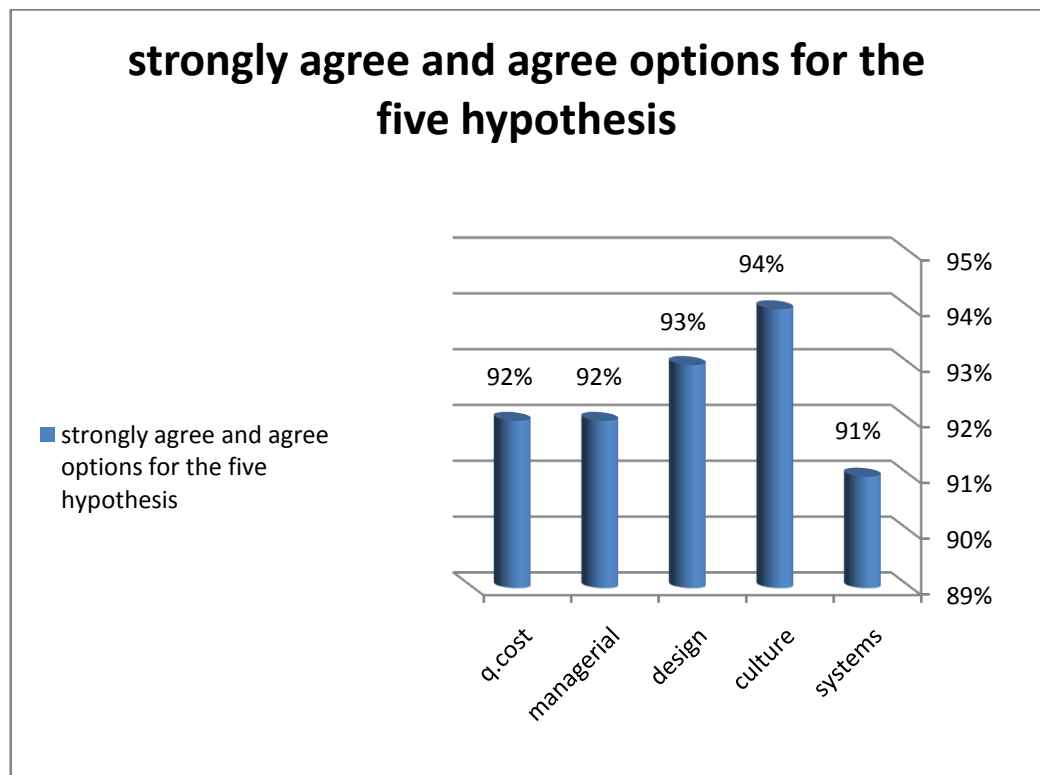
### 3. Hypotheses discussion

3-a strongly agree and agree options for the five hypotheses:

Figure (42) bellow illustrate that our five questions obtain high percent (91% – 94%). Of answer agree and strongly agree which indicate a significant impact for EFQM excellence model implementation on our hypothesis which means that the five hypotheses are accepted. These results ensure that SHG. Implement the model properly and has a good performance in general.

*Table (42) the accumulation of the answer to our five questions with agree and strongly agree options*

**Figure (42) strongly agree and agree options for the five hypotheses**



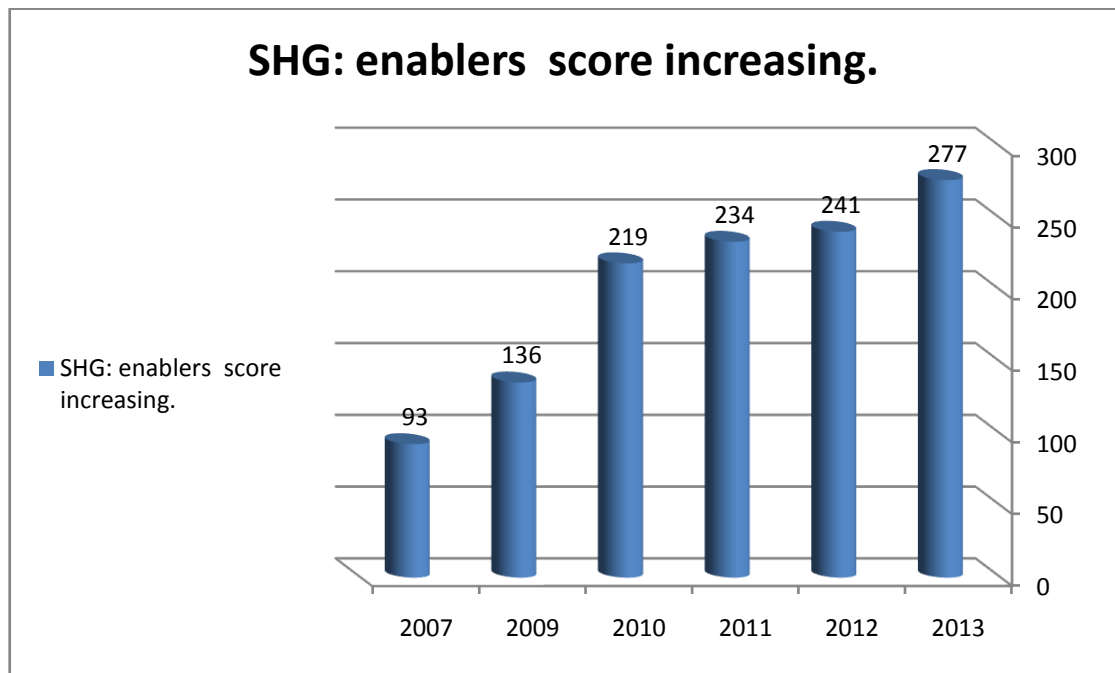
*Source: student spss analysis*

### 3-b Document investigation

We trace SHG. Participations of excellence awards from (2007 up to 2013) and drawing a graph for the enablers scoring which SHG. Obtain In these participations, to see the positive trend to provide additional evidence for the excellence performance of SHG. See figure (43)

Figure (43) SHG. Enablers Scoring.

**Figure (43)SHG enabler score**



*Source: student spss analysis*

#### 4. Tables of Reliability Analysis – Scale (ALPHA).

Statistical Reliability Analysis – Scale (ALPHA) shows that Alpha value is = (0.92), so the Reliability percent is = (92%). Statistically when the median = zero (0) that refer to the first answer choice "strongly agree" and when the median = (1) this refer to the second choice "agree" etc. The results show that p-value is zero (0.000) so it's significant for the median and as a result it's significant for the first choice "strongly agree". when the median = one (1) that means there is some results with second choice "agree" but the majority answer is the first choice "strongly agree" because the p-value is zero(0.000). Our test for all the (34 questions.) give results for p-value = (0.000) which means our hypotheses once again is accepted. See tables (2 to 6).

**Table (2): Reliability Analysis – Scale (ALPHA):-**

Alpha value is = (0.92), so the Reliability percent is = (92%)

*Test of the questions:-*

<b>No</b>	<b>The question</b>	<b>Chi-value</b>	<b>P-value</b>	<b>Median</b>	<b>S.D</b>
<b>1</b>	Our leaders define the organization's management system.	46.516	0.000	0	.53968
<b>2</b>	A framework of key processes was used to implement our strategy.	68.161	0.000	1	.65689
<b>3</b>	Organizational structure aligned with our strategy.	45.280	0.000	1	.73499
<b>4</b>	In our organization we drive the improvement of the organization's management system.	67.473	0.000	1	.75985
<b>5</b>	A clear direction and goals were sited and communicated in our firm.	107.215	0.000	0	.60638
<b>6</b>	Strategy of our organization support and develop policies of management system and procedures.	38.000	0.000	1	.56259
<b>7</b>	Products and services were developed to create optimum value for customers.	83.903	0.000	0	.65315

*Source: student spss analysis*

*Table (3): Reliability Analysis – Scale (ALPHA):-*

*Test of the questions:-*

<b>No</b>	<b>The question</b>	<b>Chi-value</b>	<b>P-value</b>	<b>Median</b>	<b>S.D</b>
<b>8</b>	Our leaders reinforce a culture of excellence with the organization's people.	84.677	0.000	0	.68545
<b>9</b>	Culture of involvement and empowerment are created among the employee.	103.075	0.000	1	.84671
<b>10</b>	Culture of ownership is our goal.	58.065	0.000	0	.50315
<b>11</b>	Possessing a culture of improvement and accountability.	91.387	0.000	1	.56693
<b>12</b>	We are promoting a culture which supports the generation of new ideas.	119.742	0.000	0	.90076
<b>13</b>	There is a sound approach to develop a culture that continually seeks to improve the effectiveness of collaboration and teamwork.	124.796	0.000	0	.70080
<b>14</b>	Using technology to support culture of creativity and innovation.	78.989	0.000	1	.95161

*Source: student spss analysis*



*Table (4): Reliability Analysis – Scale (ALPHA):-*

*Test of the questions:-*

<i>No</i>	<i>The question</i>	<i>Chi-value</i>	<i>P-value</i>	<i>Median</i>	<i>S.D</i>
<b>15</b>	Our leaders ensure that the organization is flexible and manages change effectively.	74.355	0.000	1	.62797
<b>16</b>	Our people adapt Organizational structure to support the achievement of strategic goals.	58.613	0.000	1	.75985
<b>17</b>	Processes are designed and managed to optimize stakeholder value.	72.634	0.000	1	.63408
<b>18</b>	Designing our products and services portfolio carefully.	97.699	0.000	1	.81893
<b>19</b>	We are designing and developing a meaningful mix of process performance indicator and related outcome measures.	81.495	0.000	1	.59706
<b>20</b>	Our company effectively manage change through structured project management and focused process improvement.	71.344	0.000	0	.72828

*Source: student spss analysis*

*Table (5): Reliability Analysis – Scale (ALPHA):-*

*Test of the questions:-*

<i>No</i>	<i>The question</i>	<i>Chi-value</i>	<i>P-value</i>	<i>Median</i>	<i>S.D</i>
<b>21</b>	Our leaders develop the mission, vision, values and ethics and act as role models.	92.935	0.000	0	.57977
<b>22</b>	People communicate effectively throughout the organization.	136.806	0.000	0	.53903
<b>23</b>	People's knowledge and capabilities are developed.	102.753	0.000	1	.88201
<b>24</b>	Information and knowledge are managed to support effective decision making and to build organization's capability.	83.505	0.000	1	.83713
<b>25</b>	Motivating our people to become involve in improvement and innovation.	122.430	0.000	0	.88953
<b>26</b>	Our staff manages the end to end processes, including processes that extend beyond the boundaries of the company.	61.280	0.000	0	.76491
<b>27</b>	Ensuring a healthy work in our company.	57.667	0.000	1	.84878

*Source: student spss analysis*

*Table (6): Reliability Analysis – Scale (ALPHA):-*

*Test of the questions:-*

<i>No</i>	<i>The question</i>	<i>Chi-value</i>	<i>P-value</i>	<i>Median</i>	<i>S.D</i>
<b>28</b>	The company produces and delivers Products and services to meet or exceed, customer needs and expectations.	47.677	0.000	0	.56071
<b>29</b>	We are developing an effective and efficient value chain to ensure we can consistently deliver on our promised value proposition.	80.376	0.000	0	.68460
<b>30</b>	Comparing our performance with relevant benchmarks to learn from their strengths.	49.151	0.000	1	.80945
<b>31</b>	Building and maintain a dialogue with customers, based on openness and transparency is our aim.	28.903	0.000	0	.63242
<b>32</b>	Our process owners understand their role and responsibility in developing, maintaining and improving processes to ensure quality.	78.312	0.000	1	.61041
<b>33</b>	We design the financial, control, reporting and review processes to ensure quality and optimize the use of resources.	68.677	0.000	0	.77899
<b>34</b>	Our HR. defines the skills, competencies and people performance levels required to achieve customer requirement.	78.667	0.000	1	.99977

*Source: student spss analysis*

## **5. Conclusion.**

SHG. Industrial complex had been implementing the EFQM excellence model properly and had a good practice in TQM and excellence. It was notice that the movement of building approaches improved and increasing from year to year. Through the scoring of enablers from 93 in 2007 to 277 in the last participation 2013. SHG. Research shows that the awareness is very high among the top management and line managers, also the culture is very clear among these levels 90%, but it's not a same among technicians and labors 70% especially the topics that related to strategy, for example the alignment of strategy and the cascading of strategic goals.

Study shows SHG. Had a good experience in external benchmarking, as best tool for learning from others, SHG. Used EFQM excellence model as framework for quality management and excellence performance integrated with management system and balance scorecard, as tools for improvement the results shows that the implementation of EFQM excellence model help SHG. To be flexible and managed changes effectively and leading with agility.

## **6. Recommendation.**

1. SHG. Need to build a constructed approach for the internal communication among the technicians and labors.
2. Awareness programs for the organizational culture were needed.
3. Involve technicians and labors on the supply chain of the processes (end to end processes).
4. Strategic goals cascading must be clear to the lower levels.
5. SHG. Needs a clear strategy for promoting a culture which supports the generation of new ideas and motivating policy with high transparency.
6. SHG. Need to Use technology to support culture of creativity and innovation.

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